

OF THE

DIRECTOR

OF

MEDICAL AND SANITARY SERVICES

FOR THE YEAR

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HONG KONG

MEDICAL & SANITARY REPORT FOR THE YEAR 1935

BY

A. R. WELLINGTON,
Director of Medical & Sanitary Services.

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ANNUAL MEDICAL REPORT FOR THE YEAR ENDING 31st DECEMBER, 1935.

Introduction.

Geographical Features.

In order to give a clear impression of the Public Health conditions obtaining in Hong Kong, it is necessary first to describe the situation of the Colony, its geographical features, its climate, the nature of the population, the housing conditions and the bearing old Chinese traditions, beliefs, and customs have on the question of co-operation with the authorities in the promotion and preservation of the Public Health. It is also desirable to indicate the various organisations which together make up the Public Health machinery.

- 2. The Territory under British jurisdiction includes the Colony Proper, namely, the Island of Hong Kong with the Peninsula of Kowloon, and the New Territories. The area of the Island is 32 square miles—that of Kowloon is $2\frac{2}{3}$ square miles while the New Territories have approximately 300 square miles.
- 3. Situated between 22°9′ and 22°37′ North Latitude the area under discussion is just within the northern limits of the tropics. It is in fact practically on the same level as Calcutta. It may be said to form the lower extremity of the left bank of the estuary of the Canton River, at the head of which is the City of Canton and on the right bank of which stands the Portuguese Colony of Macao.
- 4. Topographically the Island of Hong Kong and the Peninsula of Kowloon may be described as a series of granite ridges separated by narrow valleys and having here and there flat areas facing the sea. The New Territory is of similar formation with some fairly wide valleys towards the north and west. The features are such that flats suitable for town sites are few in number and limited in extent. In the Island the only level of any size is that on which the City of Victoria stands and this does not cover more than one square mile. With regard to Kowloon, not more than one half is flat and convenient for street formation.

The Climate.

5. Situated just within the northern limits of the tropics and occupying an insular position immediately south of the great land mass of China, Hong Kong's climate is very materially influenced by the direction of the prevailing winds. The North

East Monsoon blows from November until April and during this period the weather is dry and cool and invigorating. From May until October, the season of the South West Monsoon, the air is highly charged with moisture and the climate is hot, muggy and enervating. July, August, and September are marked by atmospheric disturbances which now and then culminate in typhoons or cyclones accompanied by blinding sheets of rain.

- 6. The mean annual temperature is 72°F. During the summer months the average temperature is 87°F, and there is little variation throughout the twenty-four hours. Situated on the north side of the Island the City of Victoria gets all the heat and moisture of the South West Monsoon but not the breeze, which is cut off by the mountains behind the town. During the winter months the range of temperature is from 70°F. to 45°F. with an average 66°F. necessitating for comfort the wearing of warm clothes and the provision of fires in the houses. Frost is practically unknown.
- 7. The average yearly rainfall is 85.72 inches. As might be expected most of the rain falls in the summer months.

Population and its distribution.

- 8. Hong Kong, which depends for its prosperity on its trade with China, has three-fourths of its population concentrated in the cities of Victoria and Kowloon which face each other across Victoria Harbour, a stretch of water almost a mile wide at the narrowest point.
- 9. With regard to numbers, except in census years, there are no accurate statistical figures, the great movement to and from the Colony and the facility with which the border is crossed preventing accurate checking. Hong Kong being the principal entrêpot for South China and its harbour one of the busiest in the world, every day on an average 7,000 to 8,000 individuals pass to and from China by river steamer or by rail and there are others who arrive and depart by junks or smaller vessels. During times of political unrest in China many thousands from the mainland sojourn in the Colony, some of whom return to their homes when conditions are more settled, others remaining attracted by the opportunities offered for employment.
- 10. The total civil population of the Colony is estimated to exceed 900,000, of which some 400,000 reside in the City of Victoria, 300,000 in the town of Kowloon, over 100,000 on boats in the waters of the Colony and the remainder in villages.
- 11. There are over 20,000 local boats registered at the Harbour Office, the occupants of each of which vary in number from four to forty according to the size and character of the craft. The Harbour Authorities believe the population to be 150,000 and certainly 100,000 cannot be an overestimate.

- According to the Census Report one third of the whole were born in the Colony. The remainder are mostly those who have come from China attracted by the facilities offered for employment. Children born in the Colony are frequently sent to the family homes in China, there to be brought up by the grand-parents, the parents remaining behind to earn their living. Many return to their native towns or villages when too ill or too old for labour. Through such exodus the death rates of the Colony are lower than they otherwise would be.
- 13. The masses are working people belonging to what is commonly described as the coolie class. The Chinese of the upper classes, many of whom have received a western education, are mostly engaged in commerce but there are among them a number of professional men, including both lawyers and doctors.

Housing Conditions.

- 14. The town plans of Victoria and Kowloon are widely different: the former may be described as old-fashioned and irregular, the latter as modern and regular.
- 15. The site on which Victoria stands is a narrow strip of land 4 miles long by 1/5th. to 2/5ths. of a mile broad, lying at the northern foot of the mountain and separating it from the sea. The total area of available space is about one square mile or 1/32nd. of that of the whole island. Limited in front by the sea and behind by the steep slopes of the mountain there remains hardly an inch of space which has not been occupied for one purpose or another. The conformation of the site with its rapid rise of land near the sea-shore led in the early days to the erection of houses on the narrow strip of land near the harbour and extending a little way up the lower slopes of the mountain, the houses being separated by narrow lanes and alleyways. When the population was small and the houses only one and two stories in height, the situation was not unsatisfactory. population increased the houses were heightened to four and five stories without any corresponding widening of the spaces separating them, and overcrowding with its attendant evils made its appearance.
- 16. Year by year the population continued to increase, immigration being accelerated by unrest in China. The great majority of immigrants were ignorant working people with a small wage earning capacity, accustomed to poverty, overcrowding and insanitary conditions. Victoria was the centre of trade and therefore the centre of attraction. There was little room to build further accommodation and the newcomers had to squeeze into the already overcrowded premises. Rooms were divided into cubicles which to a certain extent provided privacy but which interfered both with lighting and ventilation. Little space was reserved for kitchens, and latrine accommodations was often limited to one or more pail closets on the roofs of the buildings.

- 17. In the west-central and western districts where the bulk of the masses find accommodation there are two hundred acres where the density is at least one thousand to the acre.
- 18. It goes without saying that the maintenance of a satisfactory standard of sanitation under such conditions is a most difficult problem and one which cannot be solved without the willing co-operation of the people. One thing is certain, so long as buildings are overcrowded and insanitary, no amount of external sanitation will give immunity from disease.
- 19. Year by year the Sanitary Department and the Building Authority made efforts to improve the situation with a considerable amount of success both as regards palliative and radical treatment. The task almost sisyphean in itself was rendered more difficult by paucity of water and by opposition put forward both by property owners and by occupiers.
- 20. A Commission on Overcrowding is at present enquiring into the situation in the hope of finding some practical scheme which will offer a solution of the problem. There is no room for lateral expansion, and accommodation for those dehoused during a reconstruction scheme would be difficult to find.
- 21. Within the last few years some 70 acres have been added to the eastern section of the town by reclamation from the sea. This locality which is known as the Praya East Reclamation has been laid out in accordance with modern town planning principles, with wide streets, short lots and back-lanes. The greater part of it is now covered with dwelling houses which satisfy sanitary requirements. The density here is not more than 300 per acre.
- 22. Kowloon which is a comparatively new city has been town-planned on up-to-date lines with straight broad streets and back lanes. During the intercensus period 1921-1931 it increased in population 113.06 per cent. It is still rapidly growing and in a few years will equal Victoria or even exceed it. According to the census the density of population is 300 per acre.

Influence of traditional beliefs.

23. The traditional beliefs of the uneducated Chinese as to the cause of diseases, the means of spread and the factors which affect its course are so at variance with modern teaching that there is little chance of promoting voluntary co-operating between them and the authorities in the matter of the prevention and control of disease until they can be brought to understand the true nature of the problems and are conscious of the usefulness of the measures advocated. The proximity of China and the constant intercourse make it harder to overcome prejudices than

is the case in countries further afield. The greatest hope lies in propaganda and education brought to the homes through public health nurses working as district visitors, or infant welfare centres and school welfare centres.

24. Propaganda which does not arouse the interest of the mother and her children has little practical value. However, leaders of opinion in China and leaders of Chinese thought in Hong Kong are making vigorous efforts to promote public health and public welfare along lines which have proved successful in the Occident, and the outlook is far more hopeful than was the case a few years ago when Chinese thought on matters of health was unduly swayed by old traditions and theories.

Quarantine impractical between Hong Kong and the River Ports.

25. So closely related are Hong Kong, Canton, Macao and the River Ports, in the matter of trade, and such is the amount of traffic both human and goods which passes between them that up to date it has been found impossible to devise any system of quarantine which would effectually safeguard one city against introduction of disease from the other and at the same time preserve that freedom of commercial movements on which these cities depend for prosperity. It has been deemed best to treat them as forming one unit, as suburbs the one of the other, and to strive for a working agreement between the various health organisations to the end that some means, other than imposing restrictions against a whole port, may be found to prevent the spread of infection.

The Government Organisation for the promotion and maintenance of the Public Health.

- 26. The Colony has no municipality in the ordinary accepted sense of the term, the Governor himself being head of the city and head of the port. The functions of a Municipal Council to a certain extent are included in the functions of the Legislative Council. The Colonial Heads of Department perform duties which in a municipality would be performed by Municipal Heads of Department.
- 27. The Director of Medical and Sanitary Services is the official adviser to Government on all medical and sanitary matters and is the Officer responsible to Government for the Public Health of the Colony. Under his direction come the Government Hospital Organisation, the Inspection of Chinese Hospitals and Chinese Dispensaries, the Medical Inspection of Schools, the Bacteriological Institute, the Analytical Laboratory, Antimalarial Activities, Vaccination, Quarantine and Port Health Work, Social Hygiene Work, Maternity and Child Welfare Work, the Registration of Births and Deaths and the Public Mortuaries.

- 28. There is a Sanitary Board composed of officials and unofficials whose powers are laid down in the Public Health and Buildings Ordinance of 1903.
- 29. The Sanitary Department, distinct from and independent of the Medical Department, has at its head a Civil Servant who is ex-officio Chairman of the Sanitary Board. This department does the work usually performed by the health department of a Municipality and in addition scavenging and conservancy. Attached to it are Medical Officers of Health seconded from the Medical Department, Veterinary Surgeons and Sanitary Inspectors. The functions and powers of the department are limited to Hong Kong, Kowloon and that portion of the New Territories adjacent to Kowloon which is known as New Kowloon.
- 30. The principal ordinances which have effect in matters of hygiene and sanitation are:—
 - (a) The Public Health and Buildings Ordinance.
 - (b) The Sale of Food and Drugs Ordinance.
 - (c) The Water Works Ordinance.
 - (d) The Births and Deaths Registration Ordinance.
 - (c) The Boarding House Ordinance.
 - (f) The Factories and Workshops Ordinance.
 - (g) The Summary Offences Ordinance.

The Public Health and Buildings Ordinance of 1903 resembles somewhat the Public Health Act of 1875. It deals with infectious diseases of humans and animals, the wholesomeness of foods, abattoirs, markets, dairies, food factories, food shops, nuisances, scavenging and cleansing, drainage, sewerage and sewage disposal, latrines, urinals and water closets, factories and workshops, laundries, offensive trades, buildings, wells and pools.

31. The Public Works Department is the Authority under the Waterworks Ordinance. The Sanitary Department is responsible for the carrying out of the provisions of the Public Health and Buildings Ordinance except in so far as it refers to buildings, drainage and sewerage, wells and pools, which are dealt with by the Public Works Department. The Sanitary Department also deals with the Sale of Food and Drugs Ordinance. The Boarding House Ordinance, which controls lodging houses, boarding houses and hotels, and the Factory and Workshops Ordinance are under the authority of the Secretary for Chinese Affairs. The Births and Deaths Registration Ordinance is administered by the Medical Department. The Summary Offences Ordinance is the concern of the Police.

- 32. Transport of the sick is carried out by motor ambulances garaged at the fire stations and controlled by the Police and Fire Department. Hand ambulances are operated by the Sanitary Department.
- 33. The following are the Government institutions for medical relief:—

inoutour romor.		411-11-11-11
	1 2 3 1 1 C	Authority in Control.
On the Island:—	4 (1) (1) 3 (1) (1	20102 0=10 00 010 = 2010000000001
Government Civil Hospital. Mental Hospital Victoria Hospital Tsan Yuk Maternity	246 beds. 32 ,, 72 ,,	Medical Department.
Hospital Infectious Diseases Hospital Gaol Hospital Violet Peel Health Centre. Venereal Diseases Centres	30 _ ,,))))))
(two in number)		,,
In Kowloon:— Kowloon Hospital Maternity & Infant Welfare Centre Venereal Diseases Centres (two in number)	-0 A To 000	9 9 9 9
In the New Territories:—	0.00	and the second
Jubilee Dam Hospital Ruttonjee Dispensary, Sham Tseng Un Long Dispensary Lady Ho Tung Welfare	24 ,,	9 9 7 7
Centre Taipo Dispensary and Maternity Ward Sai Kung Dispensary Tai O Dispensary		, , , , , , , , , , , , , , , , , , ,

In the New Territories there is a well equipped motor travelling dispensary which visits those villages which are on the road and which are situated at a distance from the institutions listed above. Each village is visited three times a week. Cases requiring in-patient treatment in hospital are sent to the Kowloon Hospital by motor ambulance.

- 34. Maternity and Child Welfare is carried out at two special centres one in Victoria the other in Kowloon.
- 35. School Hygiene and medical examination of school children is carried out by the school medical branch of the Medical Department working in close co-operation with the Education Department.
- 36. A special branch of the Medical Department working in close association with the Secretariat for Chinese Affairs makes periodical inspections of the Chinese Hospitals and Chinese Public Dispensaries.
- 37. Bacteriological and serological investigations are carried out at the Bacteriological Institute where vaccine lymph, antirabic vaccine and anti-meningococcic serum are prepared.
- 38. The Malaria Bureau carries out investigations with regard to mosquitology and malariology and supervises antimalaria oiling and draining. It cooperates with the Sanitary Department and with the naval, military and air force authorities.
- 39. Quarantine and Port Health Activities, including the fumigation and disinfection of ships, the examination of emigrants and vaccination, are carried out by the Port Health Branch.
- 40. Registration of Births and Deaths is controlled by the Medical Department working in association with the Police and the Chinese Public Dispensaries.

Non-Government Organisations engaged in Public Health Works.

- 41. In addition to the Government organisation there are in the Colony a number of Benevolent Societies and Associations whose activities in the cause of public health are of great benefit to the community. The chief among these are:—the Tung Wah Hospital Charity, the Chinese Public Dispensaries, the various Missionary Societies, the Granville Sharp Estate, the Society for the Protection of Children, the St. John Ambulance Association, the St. John Ambulance Brigade, the Y.W.C.A. and the Y.M.C.A.
- 42. A description of the Tung Wah Hospital and the Chinese Public Dispensaries will be found in the body of the report.

- 43. The St. John Ambulance Association teaches first aid and home nursing and issues certificates after examination to successful candidates. Many hundreds of certificates have been issued. Under the aegis of the Association a number of centres have been established in the New Territories, staffed by full time Nurse-midwives. These include a hospital at Cheung Chau, three small maternity hospitals with dispensary attached and six separate dispensaries.
- 44. The St. John Ambulance Brigade, which is distinct from the Association, is a body which practises in the field the theory taught by the latter. The Brigade which holds a strong position in the Colony does excellent work both in the training of personnel and in the performance of first aid duties. The Brigade renders valuable assistance to the Government especially with regard to vaccination and propaganda.

The Government Medical Department cooperates as far as possible with the Association and the Brigade. A number of Government Medical Officers hold commissioned ranks in the Brigade and assist the Association by lectures and demonstrations. Probationary home nurses receive practical instruction in the Government Civil Hospital.

In the New Territories arrangements have been made whereby Government Medical Officers pay routine visits to some of the centres and all can be called at any time for emergency work.

Medical Education.

- 45. The Faculty of Medicine of the University of Hong Kong provides a six years' course in premedical and medical sciences leading to the degrees of Bachelor of Medicine and Bachelor of Surgery which are awarded on examination. Most of the clinical teaching is carried out at the Government Civil Hospital and the Tsan Yuk Maternity Hospital where beds have been placed under the care of the clinical professors who are consultants to the Government and who have been appointed respectively Surgeon, Physician and Obstetric Physician to the Government Civil Hospital. The degrees of the Medical Faculty are recognised by the General Medical Council for registration in Great Britain.
- 46. Courses of training for nurses and midwives have been established at a number of hospitals in the Colony. Examinations are held and certificates issued by the Midwives Examination Board and by the Nurses Examination Board.

Progress with regard to Reorganisation and Expansion.

47. During the year ordinances necessary to give effect to the scheme for the reorganisation of the medical and sanitary services were passed by the Legislative Council and these will come into effect at the beginning of the coming year.

- 48. The omnibus and out of date Public Health and Buildings Ordinance will be replaced by a number of ordinances each dealing with its own side of the public health complex. The Sanitary Board will be replaced by an Urban Council of which the Director of Medical and Sanitary Services will be vice-chairman and adviser on all matters of public health including sanitation. It will be the duty of the D.M.S.S. to superintend the enforcement and observance of all Ordinances relating to the Public Health and of the by-laws and regulations made thereunder. For this purpose the Sanitary Inspectors will be grouped under the Health Officers who will be under the general direction of the D.M.S.S.
- 49. The slump in trade with the consequent reduction of revenue continued to retard progress in expansion. The erection of a new mental hospital and a new infectious diseases hospital had to be postponed and the model health centre intended as a field health station for the practical instruction of undergraduates could not be built.
- 50. It was found impossible to include in the estimates provisions for a Senior Health Officer, a Dental Surgeon and an Ophthalmologist.
- 51. However in spite of the severe financial handicap substantial advances were made in a number of directions. The following are the most noteworthy.
- 52. The Queen Mary Hospital:—The foundation stone of the Queen Mary Hospital—formerly known as the New Government Civil Hospital—was laid by His Excellency the Governor on the 10th of May. By the end of the year the carcass of the hospital proper and that of the quarters for the nursing staff were almost completed and satisfactory progress had been made with regard to the flats for medical officers and other members of the staff.

When finished this hospital will furnish accommodation for five hundred patients. Situated on the south side of the island five hundred feet above the sea and below the fog line, it occupies one of the finest sites on the island.

53. The Violet Peel Health Centre:—The Eastern District Health Centre, named after Lady Peel the Violet Peel Health Centre, was opened on the 13th of May when Mr. Tang Shiu Kin on behalf of the Chinese gentlemen who paid for its erection handed over the keys to His Excellency the Governor for use as a Government institution to be staffed and run by the Medical Department. A two-storied building it contains on the ground floor an infant welfare centre, a school medical centre, a dispensary and a general clinic. Attached is a venereal diseases clinic.

On the first floor there are administrative offices and a crêche. In time it is intended that the offices will be occupied by the District Health Officer and his staff but at present they furnish accommodation for the Society for the Protection of Children.

- 54. The Kowloon Hospital Extension:—The Kowloon Hospital Out-patients Department building was opened on the 11th of March. This spacious and up-to-date structure contains a waiting hall, dressing rooms, doctors' rooms, clerks' office, dark room and a laboratory. Under the same roof, but partitioned off, is a fully equipped venereal diseases centre.
- 55. Taipo Dispensary Extension:—During the year the Taipo Dispensary was furnished with six maternity beds so that it is now a combined dispensary and maternity hospital.
- 56. Lady Ho Tung Centre Bus:—This centre was supplied with a light bus for the free transport of those villagers who lived some distance from the Centre.

SECTION I.

Administration.

57. The total authorised establishment of the Medical Department for the year 1935 was as follows:—

Administrative Staff. The Director of Medical and Sanitary Services	1
Deputy Director of Medical and Sanitary Services	1
Clerical Staff.	
Secretary	1
Assistant Secretary	1
Stenographer	1
Accountant	1
Clerk Class I	1
,, ,, II	1
,, ,, III	3
,,	6
,, ,, VIA	2
,, ,, VIB	20
,, Special Class	1
Investigative Division.	
Bacteriological Institute.	1
Bacteriologist	1
Assistant Bacteriologist	1
Senior Laboratory Assistant	4
Laboratory Assistants	1
Laboratory Assistant (Probationer)	1
$Malaria\ Bureau.$	
Malariologist	1
Assistant to Malariologist	1
. Malaria Inspectors	5
$Chemical\ Division.$	1
	1
Assistant Analysts	3
Assistant Analyst (Chinese)	1
Assistant Analyst (Chinese) Class II	. 1
Sampler	1

— **M** 19 —

HEALTH DIVISION.

General Branch.

Health Officers	3
Chinese Health Officers	1
Lady Medical Officer (Part time)	1
Port Health Branch.	
Port Health Officers and Inspectors of Emigrants	2
	2
	1
Tubile Vaccinatoris	12
Fumigating and Disinfecting Bureau.	
Secretary	1
Fumigator	1
Interpreter	1
77	
Venereal Diseases Branch.	1
Venereal Diseases Officer	
Chinese Venereal Diseases Officer	
Venereal Diseases Technical Assistant	$\frac{1}{2}$
Dressers (Staff)	
Venereal Diseases Nurse	1
Maternity and Child Welfare Branch.	
Lady Medical Officer	1
Chinese Lady Medical Officer	
Infant Welfare Nurses	
Interpreter	
School Hygiene Branch.	
Health Officer for Schools	
Chinese Medical Officers for Schools	
School Nurses	5
Chinese Hospitals and Dispensaries Branch.	- 16
Visiting Health Officer	1
Lady Visiting Medical Officer	
Chinese Resident Medical Officers	
Chinese Lady Medical Officers	
Stenographer	
Dispensary Nurse	
Midwives	
	C

MEDICAL DIVISION.

Clinical Branch.

Cunteut Branch.	
Government Consultants	
Senior Medical Officer	
Medical Officers	
Chinese Medical Officers	. 4
House Officers	. 4
Nursing Staff (General).	
Principal Matron	. 1
Matrons	
Home Sisters	. 2
Tutor Sister	. 1
Nursing Sisters (3 Vacancies)	
Nurse (Charge) (Vacant)	
Nurse (Staff)	
Nurses (Probationers)	
Midwife	
Dressers (Charge)	
Dressers (Staff)	
Dressers (Probationers)	
Lanen Wald	
Linen Maid	. 1
Nursing Staff (Mental Hospital).	
Nursing Staff (Mental Hospital). Head Attendant	. 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant	. 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses	. 1 . 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant	. 1 . 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters	. 1 . 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases).	. 1 . 1 . 3
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff)	. 1 . 3 . 2
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer)	. 1 . 3 . 2
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge)	. 1 . 3 . 2 . 2
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge) Dresser (Staff)	. 1 . 3 . 2 . 2 . 1 . 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge) Dresser (Staff) Dresser (Probationer)	. 1 . 3 . 2 . 1 . 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge) Dresser (Staff)	. 1 . 3 . 2 . 1 . 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge) Dresser (Staff) Dresser (Probationer) Wardmaster Tsan Yuk Maternity Hospital.	 1 3 2 1 1 1 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge) Dresser (Staff) Dresser (Probationer) Wardmaster Tsan Yuk Maternity Hospital. House Medical Officer	 1 3 2 1 1 1 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge) Dresser (Staff) Dresser (Probationer) Wardmaster Tsan Yuk Maternity Hospital. House Medical Officer Matron	 1 3 2 1 1 1 1 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge) Dresser (Staff) Dresser (Probationer) Wardmaster Tsan Yuk Maternity Hospital. House Medical Officer Matron Assistant Matron	 1 3 2 1 1 1 1 1 1
Nursing Staff (Mental Hospital). Head Attendant Assistant Attendant Mental Nurses Wardmasters Kennedy Town Hospital (Infectious Diseases). Nurses (Staff) Nurse (Probationer) Dresser (Charge) Dresser (Staff) Dresser (Probationer) Wardmaster Tsan Yuk Maternity Hospital. House Medical Officer Matron	 . 1 . 3 . 2 . 1 . 1 . 1 . 1 . 1 . 4

Stewards.

Steward	1
Assistant Steward	1
D1 D	
Pharmacy Branch.	4
	1
*	2
*	1
Dispensers (Charge)	4
Dispensers (Staff)	1
Dispensers (Probationers)	3
Radiological Branch.	
Radiologist	L
Radiographers 2	}
Masseuses 2	2
X-Ray Sister 1	
Probationer Masseuses 3	}
Radiographic Assistants 2	
New Territories Branch.	
Medical Officer 1	
Chinese Medical Officers	i i
Midwives (2 Vacancies)	1
Dresser (Charge) for Travelling Dispensary 1	
Driver for Travelling Dispensary 1	
Miscellaneous.	
Office Attendants, Messengers, Wardboys, Amahs, Coolies, etc. (19 Vacancies)380	
PRINCIPAL CHANGES IN PERSONNEL.	

- 58. The following were the principal changes which took place during the year:—
- Dr. A. R. Wellington, Director of Medical and Sanitary Services, went on leave on January 29th and resumed duty on October 25th. Dr. W. B. A. Moore acted as Director of Medical and Sanitary Services during Dr. Wellington's absence.
- Dr. D. J. Valentine, Medical Officer, acted as Deputy Director of Medical and Sanitary Services from 29th January to 24th October.

- Mr. R. E. Cable returned from leave on 15th January and resumed duty as Apothecary. Mr. L. J. Morley acted as Apothecary during the absence on leave of Mr. R. E. Cable.
- Miss S. I. Summerskill, Matron Civil Hospital, acted as Principal Matron from 26th July.
- Miss A. M. Davies, Nursing Sister, acted as Matron Civil Hospital from 26th July.
- Miss J. A. Davis returned from leave on 7th February and resumed duty as Matron Kowloon Hospital.
- Miss S. F. Sutton, Home Sister Kowloon Hospital, acted as Matron Kowloon Hospital until 6th February.
- Miss D. P. Geen, Nursing Sister, acted as Home Sister Kowloon Hospital during the absence on leave of Miss S. F. Sutton from 6th April.
- Mr. L. A. Collyer returned from leave on 21st August and resumed duty as Assistant Attendant, Mental Hospital, and acted as Head Attendant, Mental Hospital from 24th August.
- Dr. J. M. Gray, Health Officer, acted as Venereal Diseases Officer from 12th January to 25th December during Dr. J. A. R. Selby's absence on leave.
- Dr. R. S. Begbie returned from leave on 14th November and resumed duty as Assistant Bacteriologist.

APPOINTMENTS.

Name of Officer.	Designation.	Date of assumption of duty.
Prof. W. C. W. Nixon Dr. G. H. Henry Dr. Cheung Shiu Fan Mr. W. Kershaw Dr. (Mrs.) A. L. J. Dovey Dr. J. E. Jones	Government Consultant Medical Officer Ch. Medical Officer Storekeeper Lady Medical Officer and Supervisor of Midwives (Part-time) Health Officer	14.11.35 1. 5.35 1. 7.35 14. 1.55 1. 2.35 26.12.35

RESIGNATIONS OR RETIREMENTS.

Name of Officer.	Designation.	Date of Resignation or Retirement
Prof. R. E. Tottenham Dr. A. D. Wong Miss M. J. Wilson Mr. J. Murray	Government Consultant Ch. Medical Officer Principal Matron Head Attendant, Mental Hospital	17. 5.35 30. 6.35 29.11.35 15.10.35

OFFICERS ON VACATION LEAVE IN EUROPE.

Name of Officer.	Designation.	Date of Departure.	
Dr. A. R. Wellington	Director, Medical &	,	
S	Sanitary Services	29. 1.35	25.10.35
Dr. I. Newton	Medical Öfficer		3. 4.35
Dr. G. V. A. Griffith	do.		10. 1.35
Dr. P. F. S. Court	do.	9. 2.35	
Dr. J. B. Mackie	do.		29.10.35
Dr. L. D. Pringle	do.	20. 4.35	******
Mr. R. E. Cable	Apothecary		15. 1.35
Mr. L. J. Morley	Asst. Apothecary	$9. \ 2.55$	30.10.35
Miss J. A. Davis	Matron, Kowloon		
	Hospital		7. 2.35
Miss S. F. Sutton	Home Sister,		
	Kowloon Hospital	6. 4.35	26.12.35
Mr. L. A. Collyer	Asst. Attendant,		
1.	Mental Hospital		21. 8.35
Dr. J. A. R. Selby	Venereal Diseases		
	Officer	12. 1.35	26.12.35
Dr. R. S. Begbie	Asst. Bacteriologist	12. 1.35	14.11.35
Mr. V. C. Branson	Analyst		_

59. During the year the undermentioned officers obtained degrees or underwent courses of study as follows:—

Name of Officer.	Degree of Course.
Dr. I. Newton Dr. P. F. S. Court	F.R.C.S. (Edinburgh). F.R.C.S. (Edinburgh). Course for medical examination of
Dr. J. B. Mackie Mr. V. C. Branson	candidates for Air Pilots licences. D.P.H. (Liverpool). F.I.C. (Branch E.) (Royal College of Science). Investigated methods of sampling and analyses of tin in London.

60. Expenditure for 1935 and 1934 Compared.

60. Expenditure for 1935 an	р 1934 Сомра	RED.
	1934.	1935.
Personal Emoluments	\$1,053,087.22	\$1,007,818.43
OTHER CHAR	GES.	
A.— $Staff$		
Cenveyance Allowances		\$ 15,050.91
B.—Gener		\$ 34.50
Artificial Limbs	15,787.70	\$ 34.50 15,888.74
Board for 5 House Officers	1,825.00	1,825.00
Board and Lodging for 6 Pupil-	1,020.00	1,020.00
Midwives	480.00	368.00
Books	502.24	279:11
Bonuses to Dispensary Licentiates		
and Clerks for vaccination of	1 510 10	4 690 10
children and registration of births	4,549.10	4,638.10
Cleansing materials	6,859.30 1,959.00	6,770.67
Expenses of courses of study and	1,999.00	1,677.00
attendance at Medical Congresses	4,175.12	3,732.83
Fuel and Light	63,357.86	59,205.62
Grants to Protestant and Roman		
Catholic Chaplains for Religious Services	1 900 00	1 000 00
Services	1,800.00 3,304.33	1,800.00
Maintenance of lunatics at Canton.	8,674.02	2,394.31 8,943.46
Medical Comforts	659.40	343.52
Medicines, Surgical Appliances and	000.40	040.02
Instruments	77,691.01	64,508.21
Nursing Board Expenses	2,315.50	1,926.90
Provisions for patients	116,907.34	99,432.02
Rent of Premises for Dispensaries		
and Infant Welfare Centre	5,334.50	4,940.00
Transport	1,293.80	1,424.37
Treatment of Opium Addicts	1,968.00	2,069.50
Upkeep of Hospital Equipment, etc.	13,251.05	9,556.68
Upkeep of X-ray Apparatus	11,799.41	12,542.70
Upkeep of Travelling Dispensary and Motor Bus for Lady Ho Tung		/
Welfare Centre	929.65	867.40
Ventilation of Operating Theatre	445.55	389.15
Washing	15,836.46	17,145.03

C.—Port Health Officer's Office.

O.—I ort Heatth Off	••	
	1934.	1935.
Conveyance allowance	\$ 218.31	\$ 130.82
Incidental Expenses, etc	364.26	338.81
Uniforms	103.52	188.52
Running expenses, disinfecting and		
fumigating plant	32,527.28	14,189.53
Repairs to Disinfecting and Fumi-		
gating Plant		13,014.00
D. Davidania I. a.i.	. T 1°1	
DBacteriological		A 0 100 T 0
Animals and Fodder	\$ 5,942.35	\$ 2,406.79
Anti-rabic work	353.58	104.74
Apparatus and Chemicals	1,291.96	986.75
Books and Journals	18.32	40.60
Conveyance Allowances	212.04	173.71
Fuel and Light	1,575.01	1,295.20
Incidental Expenses	789.33	713.00
Preparation of Vaccines, Serum,		
etc	1,709.70	1,165.80
Uniforms	232.44	177.21
	7 77 7	
E.—Mortuaries, Victoria	a and Kowloon	<i>l</i> .
Conveyance allowance for mes-	m 1000	T 10.00
senger	\$ 18.00	\$ 18.00
Fuel and light	86.09	81.82
Uniforms	111.90	20.64
F.—Malaria B	บายสม	
Anti-malaria Field Work		\$ 847.60
	1,686.37	
Conveyance allowances	*	1,907.40
Equipment	827.67	1,368.83
Incidental Expenses	162.26	251.11
Uniforms	520.11	576.82
G.—Analytical Le	aboratory.	
Apparatus and Chemicals	\$ 3,871.15	\$ 2,383.79
Books and Journals	169.24	175.17
	180.00	180.00
Conveyance Allowances	797.22	707.77
Fuel and Light	296.01	309.56
Incidental Expenses		
Uniforms	106.00	74.15
Total Personal Emoluments		
and Other Charges\$	31,483,969.06	\$1,389,472.30

Special Expenditure.

	1934.	1935.
Equipment for Kowloon Hospital	§ 16,774,29	\$ 2,792.01
Lymph grinding machine for Bacteriological Institute	1,923.30	
Steel Office Equipment	650.00	635.00
Equipment for Tai Po Dispensary		2,089.16
Refrigerator for Tsan Yuk Hospital.	_	774.00
Microscope for V. D. Clinic	`	495.65
X-ray apparatus	1,100.00	7,347.82
Gestetner Duplicating Machine	847.40	_
Total Special Expenditure	\$ 21,294.99	\$ 14,133.64
Total Medical Department	\$1,505,264.05	\$1,403,605.94
Revenue for 1934 and	1935 Compar	ED.
Revenue for 1934 and	1935 COMPAR.	ED. 1935.
Revenue for 1934 and Medical Treatment		
	1934.	1935.
Medical Treatment	1934. \$ 92,388.58	1935.
Medical Treatment	1934. \$ 92,388.58 405.00	1935. \$ 88,800.31 —
Medical Treatment	1934. \$ 92,388.58 405.00 6,998.50	1935. \$ 88,800.31 — 8,071.25
Medical Treatment Miscellaneous Bacteriological Examination Chemical Analyses	1934. \$ 92,388.58 405.00 6,998.50 32,893.75	1935. \$ 88,800.31 — 8,071.25 30,773.50
Medical Treatment Miscellaneous Bacteriological Examination Chemical Analyses Bills of Health	1934. \$ 92,388.58 405.00 6,998.50 32,893.75 9,960.00	1935. \$ 88,800.31 — 8,071.25 30,773.50 8,856.00
Medical Treatment Miscellaneous Bacteriological Examination Chemical Analyses Bills of Health Medical Examination of Emigrants.	1934. \$ 92,388.58 405.00 6,998.50 32,893.75 9,960.00 145,208.10	1935. \$ 88,800.31 — 8,071.25 30,773.50 8,856.00 156,310.30
Medical Treatment Miscellaneous Bacteriological Examination Chemical Analyses Bills of Health Medical Examination of Emigrants. Official Certificates	1934. \$ 92,388.58 405.00 6,998.50 32,893.75 9,960.00 145,208.10 1,295.00	1935. \$ 88,800.31 — 8,071.25 30,773.50 8,856.00 156,310.30 1,625.00
Medical Treatment Miscellaneous Bacteriological Examination Chemical Analyses Bills of Health Medical Examination of Emigrants Official Certificates Births and Deaths Registration	1934. \$ 92,388.58 405.00 6,998.50 32,893.75 9,960.00 145,208.10 1,295.00 7,811.50	1935. \$ 88,800.31 — 8,071.25 30,773.50 8,856.00 156,310.30 1,625.00 4,288.00

61.	EXPENDITURE	AND	REVENUE	MEDICAL	DEPARTMENT
	FOR	THE	PAST TEN	YEARS.	

Year.	Personal Emoluments & Other Charges.	Special Expenditure.	Total Expenditure.	Total Revenue.
1926	\$ 701,717.93	\$ 34,451.05	\$ 736,168.98	\$ 255,070.19
1927	721,623.32	16,409.47	738,032.79	307,744.48
1928	808,412.61	23.37	808,435.98	306,347.62
1929	878,058.19	17,061.08	895,119.27	299,524.51
1930	$1,\!172,\!791.22$	51,305.06	1,224,096.28	267,887.66
1931:	1,325,353.30	52,697.76	1,378,051.06	243,256.99
1932	1,316,575.34	6,689,20	1,323,264.54	260,164.87
1933	1,409,905.40	$4,\!176.19$	1,414,081.59	265,859.34
1934	1,483,969.06	$21,\!294.99$	1,505,264.05	300,900.18
1935	1,389,472.30	14,133.64	1,403,605.94	311,390.23
Total	\$11,207,878.67	\$218,241.81	\$11,426,120.48	\$2,818,146.07

In drawing comparisons between the expenditure and revenue of different years it should not be forgotten that the Hong Kong dollar is based on silver and its value rises and falls with the price of that metal. Most of the European officers draw sterling salaries and the bulk of the drugs, dressings and instruments are obtained from England and paid for in sterling. With the exchange at a shilling, the number of dollars expended on sterling priced material is double what it would have been had the exchange been two shillings to the dollar.

RATIO OF EXPENDITURE ON MEDICAL AND SANITARY SERVICES TO TOTAL REVENUE FROM ALL SOURCES.

- 62. The total revenue of the Colony from all sources was estimated at \$32,556;102.00.
- 63. Because of the overlapping which occurs when a work serves both a utilitarian and a sanitary service it is impossible to assess exactly the amounts which have been spent for purely medical and sanitary purposes. Including all water works and drainage works as sanitary works, the following (which include the salaries of the P.W.D. staff concerned) shows the commitments as laid down in the Estimates for 1935.

Expenditure	by	Medical Department	\$ 1,780.233.00
,,	,,	Sanitary Department	
, ,	, ,	Public Works Department	
,,		Police Department	300.00
,,		Motor Ambulance Service	27,755.88
,,		Subsides to Charities	146,417.00
• •	•	1.0,	 ,
		Total:—	\$ 5,399,396.88

- 64. Ratio of expenditure on Medical and Sanitary Services to total Expenditure = $\frac{5,399,396.88}{32,556,102.00}$ = 16.56 per cent.
- 65. If the expenditure on Water Works be not taken into account the ratio is 14.37 per cent.

SECTION II.

Public Health.

PART I.—VITAL STATISTICS.

CIVIL POPULATION.

66. The estimated civil population for the whole of the territories under British jurisdiction at the middle of the year was 966,341 of which 944,971 or 97.8 per cent was Chinese and 21,370 or 2.21 per cent non-Chinese. The distribution was as follows:—

Urban area of Victoria:		
·	1,254	••
•	5,830	
Chinese	7,659	
		387,743
Villages of Hong Kong:—		-
Europeans and Americans	350	1
Other non-Chinese races	118	
Chinese 48	3,832	*
		49,300
Total for Hong Kong Island		437,043
Urban area of Kowloon including New Kowloon	:	
	4,806	·
Other non-Chinese races	5,987	
Chinese	1,204	. 1
Total for Kowloon & New Kowloon		324,997
Junks and Sampans:—		(=) :
Chinese		100,000
New Territories exclusive of New Kowloon: -		
Europeans and Americans	25*	
Chinese 104	4,276	
		104,301
Total civil populations		966,341
The second second	1 100	

^{*} In addition there were 26 engaged temporarily at Shing Mun Dam.

The last terms of the second o

67. During the year 3,347,473 persons entered and 3,412,020 left the Colony, by steamer and by raiload making a surplus of emigrants over immigrants by these routes of 43,296. Fuller details are as follows:—

	Arrived.	Departed.
River steamer	1,748,386	1,826,631
Railway	1,065,473	1,059,469
Ocean going steamers.	533,614	525,920
Total	3,347,473	3,412,020

This does not represent the total movement between Hong Kong and the neighbouring provinces of China for there are many who arrive and depart by coasting vessels, junks and sampans. It is estimated that on an average over 8,000 arrive and depart daily.

BIRTHS AND DEATHS REGISTRATION.

- 68. The Registration of Births and Deaths Ordinance has since 1911 applied to the whole territory under British jurisdiction but until 1932 no action was taken to enforce it in the New Territories where registration of both births and deaths had been the exception rather than the rule.
- 69. As a result of the better enforcement of the law and still more as a result of the introduction of a new Births and Deaths Registration Ordinance, which did away with certain fees and penalties, the registration of births increased throughout the Colony, more particularly in the New Territories.
- 70. Registration of births is however still far from complete and many births, especially of females, are never recorded.
- 71. In view of the increased numbers of births and deaths registered in the New Territories, it was decided from 1934 to calculate the birth and death rates on the population of the whole Colony and not to exclude the New Territories as theretofore.
- 72. Death registration in the Colony being a necessary preliminary to a permit to bury, it may be taken for granted that practically all deaths are registered. Bodies found dumped or abandoned in the streets and open spaces, are taken to the Public Mortuaries where they are examined by the Medical Officer who fills in the necessary certificates which go through the Coroners' hands to the Registrar. All certificates of deaths are scrutinized by the Medical Officer of Health.

BIRTHS.

73. The following table shows the number of births registered during the last five years:—

0	· ·				
	1931.	1932.	1933.	1934.*	1935.*
Chinese	12,055	13,166	14,909	20,424	24,510
Non-Chinese		431	453	462	527
Total	12,443	13,597	15,362	20,886	25,037

^{*} Includes those from New Territories.

DEATHS.

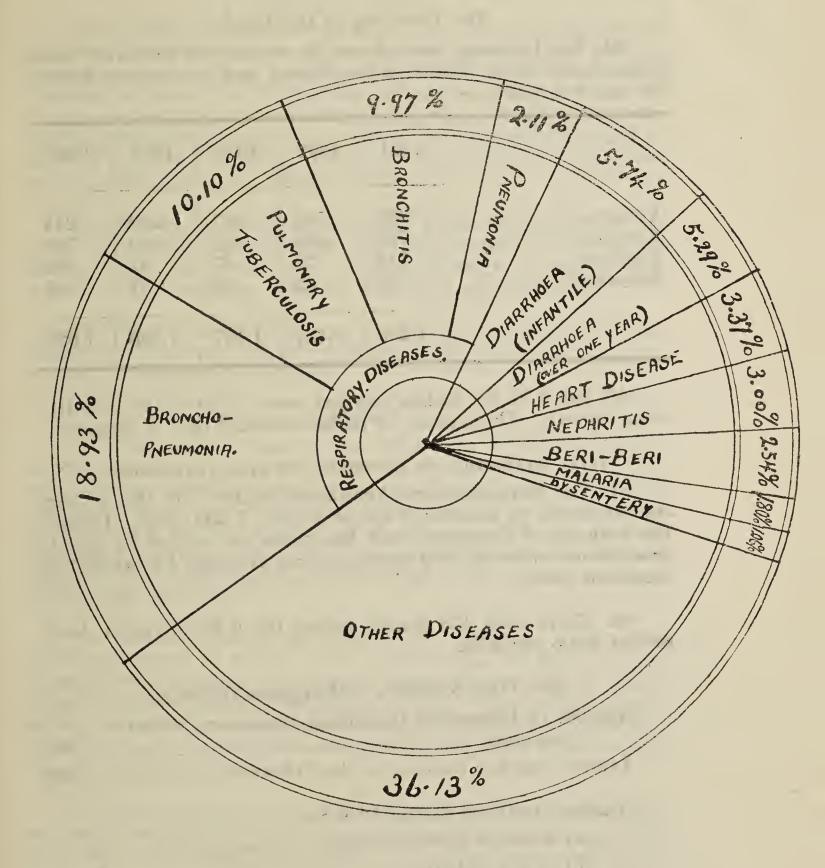
74. The deaths registered among the civilian population of the Colony (including New Kowloon and New Territories) was 22,133 giving a crude death rate of 22.90 as compared with 20.93 for the previous year.

Year	Deaths		Death rate per mille population
1934	Chinese 19,516	923,584	21.13
1935	Non-Chinese 250 Chinese 21,913 Non-Chinese 220	$ \begin{array}{c c} 20,908 \\ 944,971 \\ 21,370 \end{array} $	$ \begin{array}{c c} 11.96 \\ 23.19 \\ 10.25 \end{array} $

75. The principal diseases causing deaths were:—

	No. of	Percentage		ı rate
Disease.		of total	per :	mille
	deaths.	deaths.	popul	ation.
			1934	1935
Broncho-pneumonia	4,190	18.93	3.20	4.33
Pulmonary tuberculosis	2,237	10.10	2.31	2.31
Pneumonia	469	2.11	0.56	0.48
Bronchitis	2,208	9.97	2.04	2.28
Diarrhoea (infantile)	1,272	5.74	1.42	1.31
Diarrhoea (over one year).	1,172	5.29	0.92	1.21
Dysentery	236	1.06	0.20	0.24
Nephritis		3.00	0.67	0.68
Heart disease — heart				
failure	746	3.37	0.71	0.77
Beri-beri	563	2.54	0.47	0.58
Malaria	400	1.80	0.39	0.41
Notifiable Diseases:—	44	0.19	0.11	0.04
Smallpox	95	$\begin{array}{c} 0.19 \\ 0.42 \end{array}$	0.07	0.09
Enteric			0.09	
Diphtheria	136	0.61		0.14
Cerebro-spinal meningitis.	54	0.24	0.13	0.05
Cholera				
Plague				
THE RESERVE OF THE PERSON NAMED IN THE PERSON	THE RESERVE OF THE PARTY OF THE	The second second second		

76. Death Clock showing percentage of total deaths caused by different diseases:—



Infantile Mortality.

77. The numbers of deaths of infants under one	e year were:—
Chinese	7,754
Non-Chinese	30

78. If the figures for the Chinese births registered represented the total births, which they do not, the infantile mortality rate for this race would be 316.36 as compared with 347.34 which was the equally incorrect rate for the previous year. Allowing that only one third of the births are registered this would still mean a very high infantile mortality figure.

79. The mortality rate among the non-Chinese was 56.92 as compared with 49.78 in 1934.

The Dumping of the Dead.

80. The following table shows the number of unknown dead bodies found by the Police in the streets and elsewhere during the last five years:—

	1931	1932	1933	1934	1935
Victoria Kowloon Harbour Elsewhere	366 738 115 76	383 884 79 82	357 881 47 62	289 679 27 61	214 708 52 64
	1,295	1,427	1,347	1,056	1,038

All but 6 of the bodies dumped were children the majority being infants. The number of males exceeded that of females.

VITAL STATISTICS OF EUROPEAN CIVILIAN POPULATION.

- 81. The Europeans and Americans resident in the Colony are estimated to number 9,435 of whom 7,290 were British. The majority of Europeans and Americans are treated by private practitioners when ill, and figures are not available for calculating incidence rates.
- 82. There were 123 deaths among the 9,435 giving a death rate of 13.03 per mille.

83. Vital Statistics of European Officials.	
Number of Europeans (excluding temporary school	
mistresses)	987
Average number resident in the Colony	861
Number invalided during 1934:—	
(a) when on leave at home 0	
(b) in the Colony 6	
_	6
Number died during 1934:—	
(a) in the Colony 5	
(b) when on leave at home	
	5

PART II.—HEALTH CONDITIONS.

GENERAL REMARKS.

- 84. In the absence of some general system of registration of sickness, the only sources of information available for gauging the state of the public health in this Colony are the returns relating to deaths, the notifications of infectious diseases and the records of Government and Chinese hospitals. Judging from the death returns the health of the Colony was not quite so good as that of the previous year. The crude death rate was 22.90 per mille as compared with 20.93 for 1934.
- 85. Respiratory diseases accounted for 41.62 per cent of the total deaths; the percentage for 1934 was 39.97. The principal diseases causing death were broncho-pneumonia, pulmonary tuberculosis, bronchitis, infantile diarrhoea and diarrhoea.
- 86. The overcrowded houses, the expectorating habits of the people, and poverty furnish sufficient explanation for the prevalence of respiratory troubles.

MALARIA.

- 87. This disease which in the early days of the Colony was the great cause of death and from which Hong Kong derived its reputation of unhealthiness has now practically disappeared from the populous centres of Victoria and Kowloon as the result of the destruction of the breeding places of the carriers through efficient drainage. There is still some malaria in the outskirts of the two towns and a considerable amount in the rural areas of both the Island and Mainland.
- 88. Investigations have proved that swamps, ponds and other collections of water in the open plains, are more or less harmless and that the real danger lies within mosquito flight distance of the feet of hills and of valleys where collections of spring water in pockets, pools, swamps and streams form the breeding places of Anopheles Maculatus, Anopheles Minimus and Anopheles Jeyporiensis.
- 89. Why it is so we do not know but spring water which has not lost its sparkle does have an attraction for these three species. As a rule such water has a faint acid reaction due to dissolved carbonic acid gas. When it loses its C O2 and becomes flat it ceases to attract.
- 90. For many years the chief Vector in the Colony and New Territories was believed to be A. Maculatus. The researches of Dr. Jackson have proved this to be incorrect. A. Maculatus is a carrier but is of far less importance in the spread of malaria than A. Minimus and A. Jeyporiensis.

- 91. It appears that species of mosquitoes, like races of men, can under different conditions of climate and surroundings develop differences in habits and tastes for food. A. Maculatus in Malaya readily takes human blood and is a very potent agent in the spread of malaria. In Hong Kong, where it is very prevalent, it seems to prefer animals to humans and its importance as a Vector of paludism is much less pronounced.
- 92. Though paddy swamps on the open plains are factors of little importance in the spread of malaria the same cannot be said of the irrigated terraces which form the rice fields of the hilly country. These have been shown by the Malaria Bureau to be, under certain conditions, prolific breeding places for that powerful carrier A. Jeyporiensis. The irrigation ditches leading to and from the rice fields harbour both A. Jeyporiensis and A. Minimus.
- 93. Here as in Malaya disturbances of the soil often result in the formation of small collections of water which for reasons unknown attract the malaria mosquito and in which they deposit their eggs. The breaking of the soil is not a direct cause of malaria but a predisposing factor in a chain of events which favour the spread of the disease.
- 94. The most malarious areas are, therefore, those in or near the hills. Unless carefully watched and carefully controlled works in the vicinity of the hills which involve disturbance of the soil such as roads, railways, or waterworks are nearly always attended by high sickness and death rates among the labour forces employed. In Malaya this was especially the case when the soil was of granite formation and the same applies in Hong Kong.
- 95. Malaria not being a notifiable disease few figures are available to measure the actual extent of incidence throughout the Colony and New Territories.
- 96. On the hospital returns and on the returns furnished by certain government departments, such as the Police, it is possible to base a guess as to whether the disease is on the increase or decrease generally, but that is all.
- 97. The cases admitted to Government Hospitals numbered 475 of which 8 or 1.68 per cent died. In the Chinese Hospitals there were 925 admissions, of which 208 or 21.40 per cent died.
- 98. Among those admitted to the Government Hospitals there were 195 tertian, 159 aestivo-autumnal, and 12 quartan infections.

99. The cases admitted to the Government Hospitals during the last ten years are as follows:—

1926		970
1927		670
1928	,	485
		653
		535
		585
		465
		475
		2,0
		384
1935		384

- 100. Many of the Police Stations are screened and every man is provided with a mosquito net. Prophylactic quinine is issued and the living rooms are regularly sprayed with an insecticide in an endeavour to kill any adult mosquitoes that may be present. The police on night patrols are of course liable to infection.
- 101. The total number of deaths attributed to this disease was 400 giving a death rate of 0.41 per mille over the whole population. The low death rate is, of course, due to the fact that the great bulk of the population residing in the drained urban area is not subject to risks of infection. If figures for local districts were available it would be found that in some areas the incidence and death rates were very considerable.
- 102. During the year the Malaria Bureau continued its investigations into the life history, habits and carrying powers of the local anophelines. The results obtained were both interesting and instructive. As in previous years there was no obstruction from the local Chinese; on the contrary they took an interest in the proceedings and showed their eagerness to be of assistance. The Chinese Inspectors have shown ability and zeal.
- 103. The Bureau co-operated fully with the Army, the Royal Air Force, the Sanitary Department and Public Works Department. A full account of the activities of the Bureau will be found in Appendix "B".

OTHER INFECTIOUS DISEASES.

104 During the year there were reported 61 cases of small-pox, 110 cases of cerebro-spinal fever, 226 cases of diphtheria and 319 cases of enteric. There were no cholera cases.

1000

Pulmonary Tuberculosis.

- 105. This disease continues to rank second to bronchopneumonia as the principal cause of death. It is probable that some of the cases of the latter were of tuberculous origin.
- 106. The total number of deaths was 2,237 that for 1934 was 2,179. The death rate per mille was 2.31 the same as that for the previous year.
- 107. There is need for more hospital or infirmary accommodation for tuberculosis patients, especially for those of the poorer classes.

Smallpox.

- 108. Every year in the cold season this disease manifests itself in outbreaks which are sometimes sporadic, sometimes epidemic. Whatever the prevalence there is always a tendency for the morbidity rate to decline or disappear with the advent of summer. In the year under review there were 61 cases and 44 deaths. 18 cases only were treated in hospital the remainder did not come under the notice of the authorities until after death.
- 109. The vaccination campaign was continued and during the year 342,201 persons were vaccinated. Valuable assistance was afforded by the St. John Ambulance Brigade and by the Chinese Public Dispensaries. Both bodies engaged in active propaganda and through their efforts many were persuaded who otherwise would have kept aloof. The various sections of the Brigade again carried out street vaccination with excellent results.
- 110. The Chinese have a preference for vaccination in the spring as being the auspicious season, and for a month or two after Chinese New Year the Chinese Public Dispensaries are crowded with children waiting to be done.
- 111. The majority of Chinese still hold the opinion that the herbalist treatment of smallpox gives better results than the methods adopted by practitioners qualified in Western medicine. An analysis of the statistics of (a) the Tung Wah Infectious Diseases Hospital where only herbalist treatment is carried out, and (b) the Government Infectious Diseases Hospital where western treatment only is provided shows that this view is not correct. Calculating on the figures for the last 25 years the case death rate at the Tung Wah was 47.2 per cent while that at the Government institution was 15.25 per cent.

Plague.

- 112. For the last six years no cases of plague have been reported in Hong Kong. The disappearance of this disease not only from this Colony but from the greater part of China and its decline throughout the world are due to factors which are not understood.
- 113. Systematic rat-catching and periodical cleansing of houses were carried out throughout the year. Total number of rats collected was 192,251 of which 21,820 were taken alive, as compared with 175,687 and 21,976 in 1934. The number collected each year shows that there is no diminution in the rat population. All the rats collected were sent to the Public Mortuary for examination. None was found infected.

Cerebro-Spinal Fever.

114. The following table shows the monthly incidence of this disease for the last 5 years:—

Month.	1931	1932	1933	1934	1935
January February March April May June July August September October November December	0 1 8 1 1 2 1 3 1 1	6 2 9 111 26 16 9 7 5 3 7 8	15 39 30 33 17 14 7 5 8 0 9 14	15 27 69 53 25 15 11 3 13 5 2	10 16 22 23 10 11 5 1 4 1 6
Total	24	209	191	246	110

115. The disease is most prevalent in the cold weather. It dies down when the real summer heat sets in and people sleep more out of doors at night thus lessening overcrowding. Of the 110 cases reported, 54 or 49.09% proved fatal. Ever since the severe outbreak of this disease, which occurred in 1917, a supply of serum, made at the Bacteriological Institute from the local strains of meningococcus, is kept in stock. This serum gives very good results when used early in the disease.

Diph the ria.

116. Cases of this disease occur throughout the year, but the majority of those notified occur during the cold weather of December, January and February.

117. 266 cases were reported of which 136 proved fatal, as compared with 162 with 82 deaths in 1934.

Enteric.

118. Cases of this disease are notified throughout the year, but there is usually some increase in the number reported during the summer months. The cases are usually sporadic and the source of infection is seldom discovered. 319 cases were notified with 95 deaths as compared with 212 in 1934 with 65 deaths.

Leprosy.

- 119. Though leprosy is a notifiable disease very few cases are notified. The number of lepers in the Colony is not known but assuming that the incidence rate is the same as that of the neighbouring countries the total number cannot be less than 500 and may approach 1,000. To many, these figures will appear to be exaggerations, nevertheless they are accepted by all who are authorities on the subject and have taken the trouble to make the necessary enquiries.
- 120. The factors geographical, physical, political and commercial which render impractical quarantine measures against the River Ports have also an important bearing on the leprosy problem. Under the circumstances prevailing it is impossible to put into operation here certain measures adopted by other countries for the control of the disease.
- 121. Considering the great movements of population and the fact that the majority of the population of Hong Kong are Chinese subjects whose movements are practically unrestricted and who can cross and recross the border without hindrance the control of leprosy presents peculiar difficulties.
- 122. How to deal justly with_the afflicted who are already within our borders and at the same time avoid any risk of attracting sufferers from neighbouring provinces who may become a burden on the rates is a problem which has exercised the minds of many and one which is most difficult to solve satisfactorily.
- 123. Before 1910 there was no law with regard to lepers. In that year the Lepers Ordinance was passed with the object of controlling the situation through the segregation of lepers who were British subjects and the expulsion of others. The Government was given the sole right of providing a refuge for the afflicted and it was made an offence for any one to harbour a leper.
- 124. No asylum or refuge was built and the net result of the 1910 act was to make the position worse than it was before. Under the law, except in the case of the man rich enough to provide for himself in his own domain sufficient isolation, no treatment by a private practitioner or treatment as an outpatient

at a hospital was permissible however slight the symptoms. The Police had at once to be notified and the unhappy victim taken into custody to be expelled from the Colony if he were unable to prove himself a British subject or to be released to hide himself in hopeless isolation if he could so prove.

- 1935 which repealed that of 1910. The new Ordinance looks upon leprosy less harshly than its predecessor. The unfortunate individual who has contracted the loathsome affliction through no fault of his own is now regarded as a human case of disease who has a claim to receive the same sympathetic treatment for his trouble as is accorded to any one suffering from any other disease of a contagious nature such as tuberculosis or venereal disease.
- 126. It is the intention of Government to establish a proper leper settlement in a suitable situation when the necessary funds are available. Unfortunately the severe financial depression prevented anything being done in 1935 or any provision being entered in the estimates for 1936. The settlement when built will not be solely a place of segregation but in addition a centre for inpatient treatment and retreat for those who are unable to provide for themselves.
- 127. In May 1935 arrangements were made with the Tung Wah Hospital Committee for the use of the Smallpox Hospital as a refuge for lepers. From then until the end of the year 44 cases were admitted (34 males and 10 females).

128. The subsequent histories of those admitted were:	
Discharged for treatment as outpatients at one or other of the Government Hospitals	8
Transferred to Shek Lung Leper Settlement	8
Discharged at their own request	8
Died	9
Remaining at the end of the year	11
	1.1
	44

A European Medical Officer attended twice a week for the purpose of administering treatment.

Rabies.

- 129. Ten cases of this disease were reported during the year. Three cases occurred in humans the remainder in dogs. The human cases occurred in Kowloon. There were no cases on the Island of Hong Kong.
- 130. Two of the human cases had been treated with antirabic vaccine before the appearance of symptoms. All were fatal.

SECTION III.

Hygiene and Sanitation.

GENERAL REMARKS—ADMINISTRATION.

- 131. The Sanitary Department which is distinct from the Medical Department and over which the Director of Medical and Sanitary Services has no authority deals with the greater part of the sanitation of the Colony. The head of the department is an officer of the Cadet Service whose title is Head of the Sanitary Department.
- 132. The staff under his administrative supervision includes:—
 - (i) Two European and one Chinese Health Officers seconded from the Medical Department.
 - (ii) Two Veterinary Surgeons.
 - (iii) Fifty European Sanitary Inspectors and five Asiatic Sanitary Inspectors. Seven probationary Chinese Sanitary Inspectors were added to the staff in October.

There are a number of interpreters and a large staff of subordinates.

- 133. Included among the responsibilities of this department are:—
 - (a) the prevention or mitigation of epidemic, endemic, contagious or infectious disease in humans and animals.
 - (b) the prevention of disease caused by mosquitoes.
 - (c) measures for ensuring the purity and wholesomeness of foods during their preparation, storage and sale.
 - (d) the control of abattoirs, markets, dairies and bakeries.
 - (e) the control of eating liouses.
 - (f) town cleansing, scavenging and collection of nightsoil.
 - (g) the disposal of the dead.
- 134. For the purpose of sanitary administration by the Sanitary Department, the Island and the Peninsula have been divided into local sanitary areas, each with a sanitary office, and these in turn have been sub-divided into Health Districts each in charge of a Sanitary Inspector.

- 135. The City of Victoria is divided into four Sanitary areas and eighteen health districts. The villages on the south side of the island are in charge of one Inspector. Kowloon Peninsula has three health areas and ten health districts. It is estimated that on an average each Inspector has to deal with a population of 25,000, a very high figure for a tropical city, and especially for one so overcrowded as Victoria.
- 136. The Sanitary Department has no jurisdiction in any part of the New Territories with the exception of the urban area next to Kowloon and known as New Kowloon.
- 137. The following general review of work done and progress made in matters of sanitation is, so far as the Sanitary Department is concerned, based on facts supplied by the Medical Officer of Health. The Annual Report of the Sanitary Department is issued independently by the Head of the Sanitary Department.

PREVENTIVE MEASURES AGAINST MOSQUITOES AND INSECT BORNE DISEASES.

138. The only law on the subject is the following by-law made under the Public Health and Buildings Ordinance which is administered by the Sanitary Department:—

"When the larvae of mosquitoes are found on any premises the Board may on the advice of the Medical Officer of Health or any Assistant Medical Officer of Health give notice to the owner or occupier of such premises to remove all accumulations of water from such premises or to take steps to prevent the recurrence of the breeding places of mosquitoes in any such accumulations of water and such owner or occupier shall comply with such notice forthwith."

This by-law does not apply to the New Territories.

- 139. There are no special Sanitary Inspectors engaged in anti-mosquito work and the anti-mosquito brigade consists of two overseers and a squad of oiling coolies.
- 140. The routine work of inspection of premises for the presence of mosquito breeding was carried out by the district inspectors. Oiling of pools and destruction of mosquito breeding places was carried out by the anti-mosquito gangs.
- 141. The usual cutting of undergrowth in May and October was done in co-operation with the Botanical and Forestry Department as regards Crown Lands, and with the Military Authorities on Military lands.

- 142. The Malaria Bureau of the Medical Department continued to function throughout the year. The work done included:—
 - (a) General survey of the Colony and New Territories for the purpose of ascertaining what species of mosquitoes exist and the life history of each.
 - (b) Research regarding insect borne diseases to determine the insect hosts and the conditions influencing the spread of infection.
 - (c) Special investigation in malarious districts with a view to the eradication of disease.
 - (d) Local mosquito surveys for the abatement of mosquito nuisances.
 - (e) Co-operation with Government Departments, the Military, Naval and Air Forces, Public Companies and private individuals with regard to the investigation and eradiction of malaria.
 - (f) The teaching of mosquitology.

A full account of the activities of the Bureau will be found-in Appendix B.

GENERAL MEASURES OF SANITATION.

DOMESTIC CLEANLINESS.

- 143. Every domestic building or part of a building occupied by the members of more than one family must, unless especially exempted by the Sanitary Board, be cleansed and limewashed throughout by the owner, to the satisfaction of the Board, not less than once in every year, and notice in writing that such cleansing and limewashing has been completed shall be sent by the owner to the Secretary within three days after the date of completion.
- 144. It is the duty of the occupier of any domestic building to cause such building to be kept in a cleanly and wholesome condition and to see that the drains, traps, gratings, fall pipes, and sanitary fittings and appliances, are free from obstruction and in an efficient state of repair.
- 145. In Hong Kong there are 14,006 Chinese houses with 47,382 floors; in Kowloon there are 10,297 houses and 31,239 floors. During the year 156,594 floors in Hong Kong and 94,179 floors in Kowloon were cleansed. During the cleansing process all the furniture is moved and the floors and woodwork washed with kerosene oil emulsion.

146. Considering that each inspector has to supervise a district with approximately 25,000 inhabitants, most of whom are ignorant of the rudiments of sanitation, the thoroughness of the cleansing operations is remarkable.

SCAVENGING.

147. Scavenging is carried out departmentally. There are twenty-three refuse lorries in use, fifteen being for Hong Kong and eight for Kowloon. 459 tons of refuse was collected daily and removed to the various refuse depots. The bulk of the refuse was ultimately disposed of by dumping in the sea at a shallow inlet with the ultimate object of reclaiming a large area and forming sites for factories.

CONSERVANCY AND SEWERAGE DISPOSAL.

- 148. The collection and disposal of night-soil in the Colony is carried out partly by the bucket system and partly by water carriage.
- 149. The excrement is removed by night from the latrines to a special fleet of junks which convey it up river to China where it is utilised as manure for the mulberry trees on which the silk worms feed.
- 150. Owing to the limitations of the water supply on the Island and the need for economy in the matter of consumption, it is necessary to restrict the number of water closets served by the public mains.
- 151. Where a sufficiency of water can be obtained from other sources, such as wells or streams, and the conditions otherwise are suitable, water closets are allowed. With regard to effluents, some enter the public sewers direct, some pass to biological tank systems to be treated before final discharge.

DRAINAGE.

152. Drainage both surface and subsoil is controlled by the Public Works Department. \$196,200 was entered in the 1935 Estimates for a programme which included drainage, training of nullahs and sewerage. \$60,000, which includes costs of resumption was provided for anti-malaria works.

WATER SUPPLIES.

- 153. The water supplies of Hong Kong and Kowloon are in charge of the Water Works Branch of the Public Works Department.
- 154. All the water is surface water and most of it is collected from catchment areas which are free from ordinary risks of pollution. The water, after storage for a longer or shorter period in impounding reservoirs, is filtered in some cases by slow sand filters, in others by the rapid system, and finally it is chlorinated.

155. Routine examinations are carried out by the Government Bacteriologist and Government Analyst and the results furnished to the Water Authority. The results show that the water as supplied to the consumer is of excellent quality.

COMMON LODGING HOUSES.

- 156. Boarding Houses which include every place where any person is harboured or lodged for any kind whatsoever of hire or reward and where any domestic service whatsoever is rendered by the owner, lessee, principal tenant, occupier, or master to the person so harboured or lodged, but which do not include any boarding house for non-Chinese seamen within the meaning of the Merchant Shipping Ordinance, are licensed and controlled by the Secretary for Chinese Affairs under the Boarding House Ordinance.
- 157. They include hotels, common lodging houses, places where empolyers lodge their employees and the premises of societies within the meaning of the Societies Ordinance, where persons pass the night.
- 158. Under the Public Health and Buildings Ordinance "Common Lodging House" includes any house or part thereof or other permanent structure where male persons of the labouring, artizan or mechanical classes, not being members of the same family, to the number of ten persons or upwards are housed, but does not include a house or other permanent structure where shopmen or domestic servants are housed by their employers.
- 159. Under the Public Health and Buildings Ordinance the Sanitary Board is given power to make by-laws for the licensing, regulation and sanitary maintenance of Common Lodging Houses.
- 160. Sixteen by-laws have been made under this Ordinance, one of which passes the power of registering the houses and licensing the keepers to the Secretary for Chinese Affairs.
- 161. In practice the Sanitary Department report on the condition of the house and if declared sanitary the Secretary for Chinese Affairs, if he be satisfied, registers it and licenses the keeper.
- 162. As mentioned above Boarding Houses include Common Lodging Houses. Some 550 Chinese Boarding House licences have been issued by the Secretary for Chinese Affairs. They vary in class from 3rd class lodging houses to 1st class hotels.

LABOUR CONDITION.

- 163. There are no estates, plantations or mines, and comparatively few large factories. The majority of the urban labouring classes are engaged in matters connected with commerce, shipping or public works and the bulk of the remainder find employment in shops or workshops or independent businesses. There is no need for recruitment of labour, the supply being more than sufficient to satisfy all demands.
- 164. Labourers find their own accommodations in the many tenements and lodging houses which exist in Hong Kong and Kowloon.
- 165. The Factories and Workshops Ordinance administered by the Secretary for Chinese Affairs contains sections bearing on the health of factory workers. The Public Health and Buildings Ordinance also contains sections bearing on the health of factory workers.
- 166. Ordinarily there are no special arrangements for the medical care of labourers other than the Government Hospitals, the Chinese Hospitals, the Chinese Dispensaries and the Mission Hospitals. The total number of third class beds in these institutions available for general diseases are about 1,200 or 1 to 700 approximately.
- 167. Special arrangements were made for the care of the labourers engaged in the Shing Mun Water Works Scheme which was in full swing during the year. Anti-malaria precautions were taken and hospital accommodation and medical supervision provided.

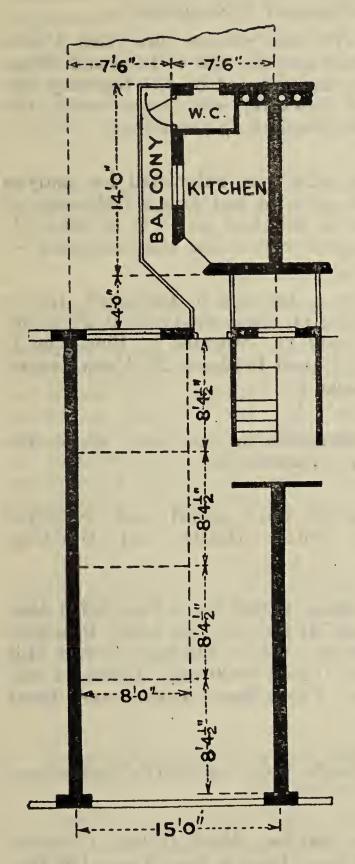
HOUSING AND TOWN PLANNING:

- 168. There is no Town Planning Ordinance and Housing comes under that portion of the Public Health and Buildings Ordinance which is administered by the Public Works Department. Except that offensive trades are confined to the western end of the town there is little or no zoning in the older parts of Victoria and blacksmiths shops and even foundries are to be found in the midst of shop-houses and domestic buildings. The new reclamation in Victoria called the Praya East has been laid out on modern lines with wide streets and back lanes. The greater part of Kowloon and New Kowloon has been planned on up-to-date principles and the zones recommended by the Town Planning Committee of 1923 are being adopted.
- 169. The buildings portion of the P.H. & B. Ordinance being out of date in many respects the Buildings Ordinance 1935 was passed to replace it. It having been decreed that this enactment should come into force in 1936 it had no bearing on activities taken in the year under discussion.

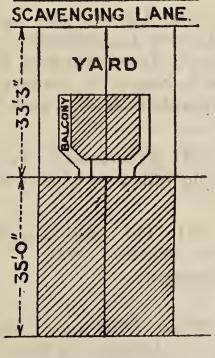
170. The following list shows some of the work done during the year by, or under the supervision of the Sanitary Department (items 1 - 4) and the building branch of the Public Works Department (items 4 - 10).

	Nature of Work.	No. of	Cases
		1934.	1935.
1.	Obstructions removed from open spaces	458	1,565
2.	Obstructions to light and ventilation		
	removed	1,604	1,769
3.	Rat holes stopped	1,119	2,451
4.	Water closets installed in private buildings	1,415	2,121
5.	Houses demolished (domestic)	72	151
6.	Houses demolished (non-domestic)	33	11
7.	Houses erected (domestic)	420	297
8.	Houses erected (non-domestic)	99	55
9.	Houses re-constructed (domestic)	196	176
10.	Houses re-constructed (non-domestic)		- 10

- 171. The City of Victoria for the area it occupies is over housed and grossly over-populated. In certain districts a great deal of improvement has been brought about but in some 200 acres where there are approximately 1,000 persons to the acre sanitary conditions are bad.
- explained in the introduction to this report. The situation is at the same time a sanitary problem, a social problem and an economic problem. Victoria is the centre of attraction for the stream of immigrants from China, most of whom are poor people who live from hand to mouth. Accommodation is limited but the people must find shelter somewhere. A cubicle rents for ten dollars per month, a bed in the passage costs three to four dollars, food costs at least six dollars and the average earnings of a coolie are about eighteen dollars.
- 173. There is no space to build further houses and demolition means an increase of concentration in those that remain.
- 174. One hopeful sign is that the people are being more and more attracted by Kowloon, Praya East and North Point where concentration is much less marked.
- 175. The following plans shew a common type of Chinese tenement house approved by the Building Authority.
- 176. Provided the occupants keep the premises clean and the windows free from obstruction to the light and ventilation and avoid overcrowding the building is hygienic and well fitted for human occupation.



BLOCK PLAN
CAVENGING LANE.



STREET

SCALE | INCH = 30 FT.

PLAN OF A FLOOR IN A
MODERN CHINESE TENEMENT

SCALE | INCH = 10 FT.

FOOD IN RELATION TO HEALTH AND DISEASES.

INSPECTION AND CONTROL OF FOOD SUPPLIES.

- 177. The laws dealing with this subject are the Public Health and Buildings Ordinance and the Sale of Food and Drugs Ordinance both of which are administered by the Sanitary Department. Stall-holders and hawkers, who come under the Licensing Ordinance, 1887, are licensed by the Police.
- 178. 80 samples of fresh milk were submitted for analysis under Section 12 of the Sale of Food and Drugs Ordinance of which 75 were found to pass the standard and 5 to be below it. In addition the following samples were seized and submitted:—
- 179. Apricot jam 1, Beer 1, Biscuits 6, Bread 49, Butter 15, Cheese 1, Chocolate 3, Coffee 14, Condensed milk 6, Flour 36, Ghee 3, Groundnut oil 13, Lard 11, Mustard 1, Pineapple 1, Rice 3, Sugar 10, Sweets 15, Tinned Products 26, Unsweetened Evaporated Milk 1, and Vinegar 1.
- 180. Prosecution was undertaken in one case where the sample failed to satisfy legal requirements.
- 181. The following foodstuffs were seized and destroyed under Section 82 of the Public Health and Buildings Ordinance:—
 - Fruit 2,104 lbs., Vegetables 44,925 lbs., Fish 3,731 lbs., Biscuits 62 lbs., Meat 731 lbs., Cereals 6 lbs., Preserves and Condiments 798 lbs., Wheat 312 lbs., Tinned Milk 586 lbs., Lard 1 lb., Flour 3,920 lbs., Coffee 2 lbs., Coconut Oil 100 lbs., Curry Paste 3 lbs., and Dairy Products 105 lbs.
- 182. The following foodstuffs were voluntarily surrendered and destroyed:—
 - Fish 301 lbs., Vegetables 106 lbs., Meat 43 lbs., Preserves and Condiments 95 lbs., Eggs 3 lbs., Fruit 136 lbs., Dairy Products 6 lbs., Cereals 40 lbs., Biscuits 12 lbs., Flour 21 lbs., Tinned Milk 17 lbs., and Wheat 4,420 lbs.

MARKETS, SLAUGHTER HOUSES AND DAIRIES.

183. Markets.—The markets come under the Sanitary Department. There is urgent need for larger and better markets in the City of Victoria. These are being provided as funds permit.

- 184. Slaughter Houses.—Slaughter houses and animal depots are controlled by the Veterinary Branch of the Sanitary Department. There is a Government depot at Kennedy Town (Hong Kong) for the reception of all cattle, sheep, swine and goats brought into the Colony for slaughter. The Government abattoirs are situated at Kennedy Town (Hong Kong) and at Ma Tau Kok (Kowloon). There are Government controlled slaughter houses at Aberdeen and Sai Wan Ho.
- 185. Dairies.—There are a number of dairies in the Colony all of which are licensed and inspected by the Sanitary Board.

DEFICIENCY DISEASES.

- diseases is furnished by the death returns and returns of diseases furnished by the Government Hospitals and Chinese Hospitals. The Hospitals deal with only a small proportion of the sick and the whole truth regarding the incidence of disease among the masses cannot be deduced from their figures. The death returns also are misleading in that the majority of cases were not treated by competent physicians prior to death and the Medical Officer examining a body in the mortuary had no history to assist him in coming to a conclusion as to the cause of death.
- 187. Beri-Beri.—Polished rice is the staple food of the masses yet beri-beri is not epidemic and the deaths from this disease formed only 2.54% of the total deaths. The total number of deaths recorded was 563 and the death rate per mille population 0.58. The total number treated in the Government Hospitals for this disease was 21; those treated in the Chinese Hospitals numbered 1,009.

MEASURES TAKEN TO SPREAD THE KNOWLEDGE OF HYGIENE AND SANITATION.

Hygiene and Sanitation among the populace of Hong Kong are as follows:—Every year during "Health Week" the Y.M.C.A. arranges for a series of lectures to be given. The St. John Ambulance Brigade from time to time spreads the gospel concerning some particular subject. A number of the schools teach elementary hygiene. The Chinese Public Dispensaries arrange periodically for popular lectures to be given by their medical officers. The "Schools" Branch of the Medical Department have a small demonstration centre and the school medical officers and nurses give lectures and demonstrations. At the Infant Welfare Centres endeavours are made to instruct the mothers who attend.

189. Health instruction to serve any useful purpose must arouse and return the interest of those for whom it is intended. With regard to the masses little of practical value can be accomplished without the active assistance of the mothers of the families, and the quickest and surest way of obtaining the confidence of the mothers is through health centres where free medical advice and treatment form the primary attraction and where the mothers make the acquaintance of tactful and sympathetic nurses who also act as home visitors. The second best means of influencing the mother is through the school clinic where her children are medically examined by the doctor and school nurse and where opportunity is taken to add propaganda to advice.

TRAINING OF SANITARY PERSONNEL.

- 190. The Medical Officers of Health hold classes and give lectures. Courses in chemistry, physics and sanitary engineering were held at the Technical Institute of the Education Department. At the Bacteriological Institute elementary instruction in bacteriology and mosquitology is given to sanitary inspectors.
- 191. Hong Kong is an examining centre for the Royal Sanitary Institute, and every year examinations are held for the Sanitary Inspector's Certificate and the Sanitary Science Certificate. Candidates come from Shanghai to take these examinations. The results of the last test were very satisfactory.

SCHOOL HYGIENE.

- 192. The Ordinances which apply to school hygiene are the Education Ordinance 1913 and the Public Health and Buildings Ordinance 1903. The former is administered by the Education Department and the latter by the Sanitary Department. To some extent the two overlap.
- 193. Exempted schools, viz., Government schools, Military schools and schools exempted by the Governor-in-Council are not subject to the provisions of the Education Ordinance and Government schools and Military schools are exempt from the provisions of the Public Health and Buildings Ordinance in so far as construction and alterations are concerned.
- 194. There is a tendency in some quarters to look upon school hygiene as a special branch of public health which should be administered apart from the general public health administration. This is a mistake. School hygiene forms an inseparable part of general public health and though there are aspects of the work which are best done by officers specially qualified, this should not be used as an argument for confining all matters relating to sanitation and the prevention of disease among school children to a particular body dealing exclusively with schools.

- 195. Because of the close connection between the school child and his home and through his companions with other homes, school hygiene and school welfare have an important influence on the general public health complex and especially is this the case where knowledge of hygiene and public health is of low standard among the working classes forming the bulk of the population, as happens in Hong Kong.
- 196. Not only is care of the school child's health of importance in preventing the development and spread of disease but the education of his mind in matters of hygiene and public health is the surest method known of spreading the gospel of health among the people. The two great propaganda centres for health are the school and the Infant Welfare Centre. That the child of today is the man of tomorrow is just as true in public health as it is in politics and this important fact should be more clearly recognised than it is at present.
- 197. In Hong Kong as elsewhere there should be the closet possible co-operation between the School Medical Officer, the Medical Officer of Health and the Education Officer, for without such cooperation it is impossible to get the best results. Education Officers can greatly assist the Health Officers by stimulating those in charge of schools to take prompt action where such is required in the interest of sanitation and the prevention of disease.
- 198. The schools of the Colony are divided into four classes, viz., Government schools, grant schools, subsidised schools and unaided schools. Where the medium of instruction is English they are called "English" schools; where it is Chinese they are called "vernacular" schools.
- 199. Government schools are those which have been provided by Government and which are staffed by members of the Education Department. Grant schools are institutions owned and administered by one or other of the several Missionary Organisations which function in the Colony and which receive grants from Government. Subsidised schools are private institutions which receive a subsidy from Government when the conditions warrant it. Unaided schools are those which receive no support from Government.
- 200. Government schools and grant schools are institutions designed and constructed on the lines of good class schools in Europe and America. Having been planned on approved lines and being conducted by teachers possessing a knowledge of modern hygiene they are usually well up to the mark in matters of hygienic importance.

- 201. Many of the subsidised and most of the Unaided schools are "vernacular" schools where instruction is carried out in the Chinese language by teachers who have had no special academic training in school teaching and who to a great extent are ignorant of the true meaning of hygiene. The majority of these are institutions occupying one or more floors of old or newer tenement houses and controlled by private individuals who make their living out of teaching. Such buildings were never intended for schools and in many cases it is a practical impossibility to provide for the pupils all the amenities which are generally considered necessary even if the finances of the school proprietor permitted of this being done. Generally speaking they are deficient in floor space, lighting, ventilation and latrine accommodation.
- 202. Children enter the Primary Vernacular Schools at 6 7 years of age and remain there for five years. The normal age for entering the secondary school is 12. The pupils who join the 8th or lowest class can rise one class each year until at 20 they are in the 1st class.
- 203. According to the Census the number of persons between five and fifteen years of age was 141,709. The total number of schools under inspection by the Education Department in 1935 was 1,114 and the number of scholars on the Roll was 75,480.

204. The following table shows the classification of schools and the distribution of scholars:—

Class of Institution	Gover	Government Schools.	Grant 8	Grant Schools.	Subsidised Schools,	ubsidised Schools,	Sch	Schools. Unaided	Total
	No. of Schools.	Scholars on Roll.	No. of Schools.	Scholars on Roll.	No. of Schools.	Scholars on Roll.	No. of Schools.	No. of Scholars on Roll.	Scholars.
English.				1 !			*		
Primary Secondary Vocational	11 4 2	1,783 2,150 992	13*	247 6,470		1 1 1	113	3,940	5,970 10,124 992
Total:	17	4,925	15	6,717			126	5,444	17,086
· Vernacular.			,		· · · · ·	1			
Primary Secondary Vocational	1 - 0	244	, . 4	866	310	20;830	637	35,774	56,604 1,242 548
Total:	60	465	4.	866	311	20,958	. 638	35,973	58,394
Grand total:	20	5,390	19	7,715	311	20,958	764	41,417	75,480

* This includes Ying Wa College whose primary department receives a Grant in Aid.

- 205. The School Hygiene Branch of the Medical Department consists of the School Medical Officer, two Chinese School Medical Officers, one Lady Medical Officer (part time) and five School Nurses.
- 206. The purposes of a school medical service are not only to detect the sick and ailing in their early stages, but to seek for anomalies of growth and development, so that measures may be taken to prevent not only the progress of ill-health but also its causes. Its basis is the routine medical inspection of school children, and since they are collected together for definite periods they form a section of the community whose health conditions are comparatively easy to ascertain.
- 207. Except that they have been gazetted Inspectors under the Education Ordinance to give them power of entry into certain classes of schools the School Medical Officers have no powers under either the Education Ordinance or the Public Health and Buildings Ordinance. They cooperate with the Medical Officer of Health and with the Education Officers. They act as advisers to the Education Department but it rests with the latter to decided whether or not to accept the advice offered.
 - 208. The duties of the School Medical Branch include: -
 - (1) inspection of school premises.
 - (2) physical examination and re-examination of pupils.
 - (3) medical treatment with regard to (a) general diseases, (b) defects of ear, nose and throat, (c) eye defects.
 - (4) health instruction and propaganda.
 - (5) office work, i.e., correspondence, reports, statistics, etc.
- 209. With the limited staff available for the purpose it is only possible to deal with a small part of the total hygiene work calling for attention, and this applies equally to inspection of premises, examination of personnel, treatment of disease and general health instruction and propaganda.
- 210. With regard to inspection of premises 707 visits were paid to buildings in which it was proposed to establish vernacular schools and concerning which application had been made to the Education Authority for registration. It not infrequently happens that several visits have to be paid to one building to ensure that the conditions demanded as a precedent to registration have been carried out.

- 211. It was quite impossible to carry out routine inspections of schools already registered and only where circumstances arose which demanded a special visit was one made.
- 212. This year, following a report by Mr. Burney, one of His Majesty's Inspectors of Schools, a special effort was made to survey all the vernacular schools in the Colony for which purpose a Sanitary Inspector was borrowed from the Sanitary Department. By the end of the year all the schools in the Urban districts of the Island had been visited (320 in number) and a report made on each. Before the Kowloon side could be completed the Inspector was withdrawn.
- 213. With regard to physical examination of pupils attention was confined to 13 Government schools and 3 private schools. The primary vernacular schools containing 56,000 pupils were left more or less untouched though it is here that the need for health measures is most urgent: for by the time these pupils have reached secondary school age and come under the eye of the medical officer their physical abnormalities, which perhaps might have been rectified if seen and treated sufficiently early, have become established as definite health defects.
- 214. In the year under review 4,655 medical examinations were made of which 4,199 were routine inspections and 436 reinspections. Abnormalities discovered at the time of routine inspection are classified into two groups, viz., defects in need of treatment and conditions placed on an observation list for further consideration.
- 215. The incidence of defects in need of treatment (excluding dental defects) varies with the type of school, the average being 21%. Dental disease has a very high incidence rate. The incidence rate of myopia varies from a small figure at seven years of age to 38% between sixteen and seventeen. The incidence in Government schools was 27.9% and most cases have been provided with the necessary correction glasses.
- 216. Postural deformities of chest and spine are extremely common among entrants to Government schools.
- 217. X-rays which were used as an aid to the diagnosis of pulmonary tuberculosis showed 27 positive in 967 examined, or 2.7%.

218. Treatment of Government school children is undertaken at three general and two special clinics which deal with visual defects. Attendances were as follows:—

Ellis Kadoorie School Clinic	948
Violet Peel Health Centre	602
Yaumati School Clinic	1,123
Special Clinics for eyes	370
_	
Total:—	3,043

- 219. School nurses in addition to assisting at the clinics paid 127 visits to the homes of pupils.
- 220. Two members of the medical staff are engaged at Government Hospitals on two forenoons and three afternoons in the week for the examination and treatment of eye defects. A third member on two afternoons attends the ear, nose and throat clinic to deal with cases which are sent from the local school clinics. The number of attendances at the eye clinic was 370; at the ear, nose and throat clinic 794.
- 221. The teaching of hygiene in private vernacular schools leaves much to be desired. Most of the teachers have grown up in insanitary surroundings and having received no training in the subject regard it as one of little importance. The few who are sympathetic are handicapped by the fact that the school premises do not demonstrate the principles of hygiene. Where pupils are crowded together in badly lighted and badly ventilated rooms, where the only latrine accommodation is a commode in a small kitchen, and where the kitchen drain is used as a urinal by both teachers and pupils, the atmosphere can hardly be considered as favourable for the teaching of hygiene.

SECTION IV.

Port Health Work and Administration.

GENERAL.

- 222. Reckoned in terms of shipping tonnage, Hong Kong is one of the five greatest ports in the world. It is the principal commercial entrepot of Southern China and is the termination of steamship lines running between China, Japan and North America.
- 223. In 1935, 5,092 British ocean-going steamers and 6,802 foreign ocean-going steamers entered and cleared the harbour. In addition there were 9,612 river steamers, 6,101 launches, and 17,946 foreign trade junks. The total tonnage of vessels entering and clearing was 41,487,477.
- 224. The Medical Staff engaged in Port Health duties consists of two European Health Officers and two Chinese Medical Officers.

The work of the department includes:—

- (a) Routine inspection of ships.
- (b) Quarantine duty.
- (c) Medical inspection of emigrants.
- (d) Disinfection and fumigation of ships.
- (e) Vaccination.
- 225. The laws dealing with the subject of Quarantine and Port Health are contained in Table L of the Hong Kong Port Regulations, the Asiatic Emigration Ordinance and the Vaccination Ordinance.
- 226. During the year 10,748 inward bound ocean-going vessels were boarded by the Health Officers. Of these 6,325 were on the British register and 4,423 on the foreign register.
- 227. River boats from Canton, Macao and West River Ports, also junks and small craft are normally visited only when cases of sickness or death are reported. However all river steamers are regularly inspected by a Health Inspector, whose duties are mainly concerned with the cleanliness and sanitation of such vessels.
- 228. During the year 134 special visits were made to ships for the purpose of examining persons suffering from infectious but non-quarantinable diseases.

229. 56 permits for the landing of corpses for burial were granted and 33 bodies were sent to the mortuary for postmortem examinations. Five cases of leprosy were detected amongst Chinese passengers. 23 Chinese lunatics, 2 British lunatics and 1 Filipino lunatic arrived in the Colony during the year. Bills of Health numbering 1,661 were issued.

QUARANTINE.

- 230. Hong Kong has no quarantine station for ships' passengers or crews. When segregation is necessary it is carried out on board ship at the Quarantine Anchorage. A limited number (26) of infectious cases can be accommodated at the Government Infectious Diseases Hospital at Kennedy Town but there is no room for contacts.
- 231. All vessels arriving from "infected" ports and those having infectious or suspicious cases on board fly the "Q" flag and go to a quarantine anchorage for examination.
- 232. The monthly return of quarantine ships is given in Table V.
- 233. During the year 2 vessels were detained in quarantine. For details, see Table IV. Fumigation and disinfection of these vessels and of the clothing and personal effects of those on board were carried out.
- 234. The total number of persons medically inspected during 1935, was 240,069 or an average of 640 examinations per day.

EMIGRATION.

- 235. The Asiatic Emigration Ordinance No. 30 of 1915 requires that emigrant ships shall have:—
 - (1) Proper and sufficient living accommodation.
 - (2) Proper and sufficient sanitary requirements.
 - (3) Proper and sufficient hospital accommodation.
 - (4) A sufficient supply of drugs, medical equipment and disinfectants.

It also makes provision for:—

- (1) A proper diet scale.
- (2) The prevention of the export of the unfit.
- (3) The prevention of the export of infectious diseases.

- 236. The Vaccination Ordinance 1923 requires that all emigrants from the Colony shall be protected against Small-pox by vaccination.
- 237. The duty of carrying out the sanitary and medical inspection and for vaccinating those who are insufficiently protected falls on the Port Health Officers.
 - 238. Emigrants are classified as:
- (1) "Free emigrants" or those who pay their own passages.
 - (2) Assisted emigrants or those whose passages are paid by their prospective employers.
 - (3) Women and children.
- 239. The total number of emigrants examined during the year was 158,300 of whom 154,767 were free and 3,538 assisted. The number of rejections was 623.
- 240. The continued improvement in the economic conditions in Malaya resulted in an increase in the number of emigrants proceeding to the Straits Settlements —— 102,674 as against 86,192 in 1934 and 20,324 in 1933. The total number of emigrants leaving Hong Kong in 1935 was 158,300 as against 138,240 in 1934 and 64,181 in 1933.

DISINFECTION AND FUMIGATION.

- 241. Ship disinfection and disinfestation which was at one time carried out by a private company is now done by the Disinfection and Fumigation Bureau of the Port Health Office.
 - 242. The Disinfecting and Furnigating Plant consists of: -
- (A) The hulk "Aldecoa" housing two large steam disinfectors and providing accommodation for the bathing and cleansing of a large number of passengers and the disinfection and disinfestation of their effects.
- (B) One dumb barge carrying a large B. Type Clayton apparatus.
 - (C) One A. Type Clayton machine.
- (D) Dutch ovens, sprays and other apparatus used in ship disinfection and ship disinfestation.
- 243. The Secretary of the Bureau who had been taken on the staff when Government took over the plant resigned his position and left Government service at the end of September. It was decided not to fill his post.

244. In September a Sanitary Inspector was recruited by the Crown Agents for the post of Port Health Inspector, Hong Kong. This officer was sent to the Port of London to undergo a course of instruction in modern ship fumigation and deratisation. When he arrives early in 1936 Hong Kong will be in a position to issue Deratization and Deratization Exemption Certificates on the International model.

VACCINATION.

- 245. The Government Vaccinators are members of the Port Health Staff and work under the general supervision of the Port Health Officer. They work at the Vaccination Centre and on board ships, but are detailed for work wherever required.
- 246. The number of vaccinations performed by these officers was 53,645 of which 39,806 were emigrants.

TABLE I.

Showing Emigration Passes and Rejections for 1935.

Port of Destination.	Pas- sengers.	Crews.	Rejects.
Straits Settlements	102,674	3,991	352
Canada	4,555	13,251	87
United States of America	3,289	10,323	43
Honolulu	559	-	5
Dutch East Indies	23,937	10,559	46
British North Borneo	4,482	2,154	28
Shanghai and Japan	5,827		7
Australia	677	2,963	6
South Sea Islands	792	121	7
Panama	407		6
Havana	69	2,247	1
Brazil	685	396	
Argentine	17	304	Mile mayor
Chile	1	97	_
Mauritius	493		4
Reunion	149		1
Madagascar	97	175	-
South Africa	49	994	4
India	6,051	13,461	15
Hoihow	770		*****
Portuguese East Africa	18		-
Mexico	18		-
Peru	319	537	5
Saigon	51		
Manila	2,314		6
Total	158,300	61,573	623

— **М** 62 — ТАВLЕ II.

Showing Monthly Returns of Emigrants, Crews and Rejections.

Months	Ships Examined	Pas- sengers	Crews	Rejects
t "				
January	28	12,810	4,663	15
February	21	7,804	3,598	8
March	35	26,811	5.671	66
April	37	16,824	5,692	39
May	33	16,418	5,927	97
June	32	11,106	5,101	68
July	31	10,745	5,276	54
August	33	8,747	5,312	53
September	29	12,370	5,019	69
October	34	13,133	5,369	68
November	31	9,561	5,872	60
December	. 26	11,971	4,073	26
Total	370	158,300	61,573	623

TABLE III.

Showing Causes of Rejections of Emigrants.

Diseases.	No. REJECTED.
Skin Diseases:—	- 1
Scabies	23
Tinea	
· Papular Urticaria	3
Impetigo	2
Favus	
Dermatitis	
Eye Diseases:—	
Trachoma	138
Acute Conjunctivitis	2
Ophthalmia	1
Infectious Diseases:—	
Chicken pox	13
Measles	4
Small pox	
Small pox Convalescent	1
Vaccinia	$\overline{2}$
Leprosy	1 .
ever	381
Morphia Addiction	8
Debility	$\overset{\circ}{6}$
Catarrhal Jaundice	3
Deformity	3
Syphilis	$\overset{\circ}{2}$
Phthisis	$ar{2}$
Chronic Nephritis	$ar{2}$
Cellulitis	$\tilde{2}$
Septic Hand	1
Injury to Chest	1
Abscess of Chest	1
Abscess of Neck	1
Abscess of Hand	1
Injury to Head	1
Ascites	1
Dysentery	
Enteritis	1
Fonsillitis	1
Senility	
Tuberculous Osteitis	1
Epithelioma	1
Lunacy	1
	1
Total	623

TABLE IV.

SHOWING THE NUMBER OF SHIPS DETAINED IN QUARANTINE WITH PORTS OF ORIGIN, CAUSES, DATES AND PERIODS OF DETENTION.

Name of Vessel.	From which Port.	Cause.	Cases.	Date of arrival in Quarantine.	Date of departure from Quarantine.
Talma	In emigration	Smallpox	1	19. 1. 35	19. 1. 35
Kutsang	In emigration	Smallpox	1	13. 3, 35	14. 3. 35

TABLE V.

Showing number of passengers, crews and ships arriving in quarantine in each month, 1935.

Months.	No. of	No. of	No. of
Months.	Passengers.	Crews.	Ships.
January	632	491	5
February	2,336	1,242	16
March	5,162	1,607	19
April	3,091	832	9
May	475	372	1
June	69	76	1
July			
August			
September	53	176	2
October	469	950	13
November	513	870	13
December	285	495	11
Total	13,085	7,111	90
	7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -		

TABLE VI.

Showing Quarantine Notifications issued by the Hong Kong Government for 1935.

Port of Locality.	Diseases.	Date of Notification.	Date of Cancellation.
1. Hoihow	Smallpox	No. 79 of 25.1.35.	No. 314 of 18.4.35.
2. Bangkok .	Cholera	No. 729 of 23.9.35.	

SECTION Y.

Maternity and Child Welfare.

247. MATERNITY HOSPITAL ACCOMMODATION.

Hospital.	Authority in Control.	Beds.
Government Civil	Government Medical Dept.	21
Victoria		26
Kowloon	Do. Do.	34
Tsan Yuk	Do. Do.	46
Tai Po Dispensary		5
Wanchai	Chinese Committee	31
Tung Wah	Do.	24
Tung Wah Eastern	Do.	14
Kwong Wah	Do.	59
Alice Memorial	London Mission.	12
St. Paul's	French Mission.	9
Canossa	Italian Mission.	2
Matilda*	Board of Trustees.	8
War Memorial	Do.	6
Hong Kong Sanatorium &		
Hospital		6
	St. John Ambulance Ass'n.	12
Kam Tin		8
Sha Tau Kok	Do. Do.	7
Tsun Wan	Do. Do.	7
	Total	337

248. The maternity hospitals will be described under Section VI.

MIDWIVES.

249. Under the Midwives Ordinance 1910 a Midwives Board was established with powers to make regulations regarding (a) the course and training of midwives, (b) the certification of approved persons and (c) the regulation of midwifery practice.

- 250. No one whose name is not on the Midwives Register may practise midwifery habitually for gain or describe herself as one specially qualified to carry on the work of a midwife.
- 251. Training Schools for Midwives have been established at the Government Hospitals, Alice Memorial and Affiliated Hospital, Tung Wah Hospital, Tung Wah Eastern Hospital, Kwong Wah Hospital and the H.K. Sanatorium and Hospital.
 - 252. The course of training is as follows:—
 - (a) for those who have less than two years general training two years at a Maternity Hospital recognised as such by the Board.
 - (b) for those who have had two years training in general nursing one year at a recognised maternity hospital.
 - (c) for those who are Registered Nurses (by examination) under the Nurses Registration Ordinance, Hong Kong, six months at such Maternity Hospital as aforesaid.
- 253. During the year thirty-four candidates satisfied the examiners at the Midwives Board Examinations and were certified.
- 254. The total number of names on the Midwives Register at the end of 1935 was 317 as compared with 283 in 1934.
- 255. The number of appointments on the Government Midwives Establishment was increased from 12 to 15. Of these 6 were detailed for extra duty in connection with the Chinese Public Dispensaries at Shaukiwan, Aberdeen, Yaumati, Shamshuipo and Kowloon City. The remaining 9 were stationed at the various Government Dispensaries in the New Territories. The post at Cheung Chau was abolished when the St. John Ambulance Association Hospital was opened.
- 256. During the year 2,097 cases were attended by Government midwives as compared with 1,823 in 1934.
 - 257. The services of all Government midwives are free.

ANTE-NATAL AND INFANT WELFARE WORK.

258. The ante-natal and infant welfare centres in the Colony are:—

The Government Infant Welfare Centre, Wanchai The Government Infant Welfare Centre, Kowloon

The Tsan Yuk Hospital Centre.

The Tung Wah Hospital Centre.

The Alice Memorial Hospital Centre.

The Military Centre.

Infants are of course seen and treated at all hospitals both as inpatients and outpatients and at all the Chinese Public Dispensaries.

- 259. With regard to the New Territories, Government has made provision for infant welfare at the six Government Dispensaries. The Government Travelling Dispensary which stops at road-side villages dispenses advice and medicines free.
- 260. The St. John Ambulance Brigade have established 9 centres in the New Territories where infants and mothers can receive treatment.

THE GOVERNMENT INFANT WELFARE CENTRES.

- 261. Infant welfare work received a further stimulus when the Violet Peel Health Centre was opened by His Excellency the Governor on May the 13th. This centre the first of its kind erected in the Colony occupies one corner of an open square reserved for a playground. It includes an Infant Welfare section, a school welfare section, a polyclinic and dispensary and a Venereal Diseases clinic.
- 262. The Infant Welfare section was occupied on the day following the opening of the building. The accommodation provided which includes a waiting room, a demonstration room, a doctor's consulting room, a crêche, a soup kitchen, servants' quarters and lavatories—is much superior to that available in the shop houses formerly occupied.
- 263. The central position, the more imposing building and the more commodious quarters had the effect of increasing the daily attendance until in July it had risen to an average of 82 per day. During the following three months, the daily attendance had to be limited owing to absence of some of the staff on sick leave or casual leave and there being no reliefs available.
- 264. The Venereal Diseases Clinic which has its own entrance for the general public but which can be entered by a side door from the main building provided a great convenience to the Infant Welfare Officer when mothers suffering from venereal disease came under her notice.
- 265. In Kowloon Infant Welfare work continued in the rented quarters at 225 Nathan Road. The attendances were well maintained.

266. Attendance:—The attendance at the two Centres and other particulars of interest are shown in the following tables:—

	Wanchai		Kowloon	
Month.	Total Attendance	Daily Average	Total · Attendance	Daily Average
January February. March April May June July August September October November	1491 1775 1472 1552 1637 2144 1791 1640 1827	64.88 67.77 68.26 64.00 62.08 71.17 82.47 64.10 68.33 70.27 64.80	1241 926 1186 1077 1213 1102 1498 1472 - 1201 1350 1421	47.70 42.09 46.00 47.00 48.52 47.91 57.61 56.60 50.00 52.00 56.84

Particulars of Interest	Wanchai	Kowloon
Total attendance for the year	20,183	15,041
Number of infants under supervision	2,215	1,073
Maximum attendance on one day	136	80
Average age of infant at first visit	3 months 7 days	3 mths. 14 days
Percentage breast-fed at first visit	68.5 per cent	$65~{ m per~cent}$
Percentage of males	54 per cent	50.7 per cent
Percentage living near Centre	79 per cent	73 per cent
Number of vaccinations performed	346	172
Number of Wasserman reactions tested	1,047	622
Percentage of Positive Wasserman Reactions	7.5 per cent	13 per cent
Number of Home Visits paid	295	144
Average daily attendance for soup	14.6 per cent	36.9 per cent

267. Diseases:—As in other years it was found that the great majority of infants required medical treatment on their first visits. The number found suffering from the more prevalent diseases and disorders are tabulated under:—

.,	Wanchai	Kowloon		
Digagtive Digturbance	866	538		
Digestive Disturbances	744			
Malnutrition	00	351		
Infected Umbilicus	. 86	51		
Umbilical Hernia	66	51		
Conjunctivitis	477	174		
Discharging Ears	\downarrow 49	39		
Thrush	285	205		
Skin Diseases	481	272		
Phimosis	335	117		
Jaundice	33	16		
Anaemia		$\frac{10}{22}$		
Congenital Syphilis	80	89		
Ricketa	5			
Rickets	759	$\frac{2}{2}$		
Respiratory Diseases	753	380		

- 268. Wasserman Reaction:—Since the end of March, routine examination of the blood of all new cases for Wasserman reaction has been made. The number of blood tests at each Centre was 1,047 at Wanchai, and 622 at Kowloon, and the percentage of Positive Reactions was 7.5 per cent at Wanchai, and 13 per cent at Kowloon.
- 269. Soup Kitchen:—The free distribution of soup to the poor nursing mothers and their older babies was continued throughout the year at both Centres to the great benefit of these people. The average daily attendance for soup was 14.6 at Wanchai, and 36.9 at Kowloon.
- 270. General Remarks:—Incorrect feeding with its trail of digestive disturbances continues to be our most difficult problem. Morning talks were given for some months but were discontinued when it was found that Mothers were unable to make the mental effort to listen. More time is now given to the individual instruction of each mother on her first and second visits, impressing on her the importance of regular feeds and of suitable artificial feeds when required. We have still the problem of the many mothers who are unable to read the clock.
- 271. During the year, the Society for the Protection of Children has continued to give valuable help by supplying milk for artificial feeds to poor mothers, and by visiting cases referred to them.

- 272. Home visits by the nurses at both Centres were continued when time was available.
- 273. Staff:—The Infant Welfare Staff consists of one European Lady Medical Officer, assisted by two Chinese Lady Medical Officers, five nurses, two part-time apprentice-dispensers, one interpreter-assistant, three amahs, and two coolies.
- 274. Valuable assistance has been given by a number of voluntary helpers, among whom must be mentioned Mrs. C. W. E. Bishop who has completed another year of good work.

THE TSAN YUK INFANT WELFARE CENTRE AND ANTE-NATAL CLINIC.

- 275. The Clinic is restricted to babies who have been born in the hospital. The number of new cases was 718 (628 in 1934) and the number of old cases 1847 (1,796 in 1934). The average attendance per clinic was 52.35 (47.52 in 1934).
- 276. The ante-natal clinic has been in existence for more than five years. The total number of patients who attended the clinic was 189 and the total number of visits paid was 289. The Chinese look upon pregnancy as a normal occurrence and as a rule they come to the clinic only to find out the probable date of delivery.

THE ALICE MEMORIAL INFANT WELFARE CENTRE AND ANTE-NATAL CLINIC.

- 277. The Alice Memorial Infant Welfare Centre like that of the Tsan Yuk deals only with babies who have been born in the hospital. There were 405 first visits and 390 return visits.
- 278. At the Ante-Natal Clinic there were 234 first visits and 134 return visits.

THE CHINESE HOSPITALS INFANT WELFARE CENTRES.

- 279. The Tung Wah Infant Welfare Centre is held once a week under the supervision of the Western trained medical officers. The babies are weighed and the mothers advised concerning feeding and care of infants. The total number of attendances was 2,523 that for 1934 was 2,291.
- 280. The Childrens' Clinic at the Kwong Wah Hospital is held twice a week. The number of cases seen was 5,288. An Ante-Natal Clinic is held weekly in the Maternity Block, where 110 cases were seen during the course of the year.

SECTION VI.

Hospitals, Institutes, Etc.

GOVERNMENT INSTITUTIONS.

281. The Medical institutions provided by Government for the use of the populace include:—

Hospitals—general	3
,, —mental	1
,, —for maternity & gynaecology	1
,, —for infectious diseases	1
Centres for radiology & electro-therapeutics	3
Social Hygiene or V.D. Clinics	4
Infant Welfare Centres	2
Rural Dispensaries	6
Travelling Dispensary	

GOVERNMENT CIVIL HOSPITAL.

- 282. The Government Civil Hospital, which was built in 1874 and which occupies a site in the middle of the most populous area, is the largest Government hospital in the Colony. It has accommodation for 246 patients, including the 21 maternity beds, which are in a Bungalow separated from the main buildings. The majority of the maternity beds and about 100 beds in the main building are under the control of the Clinical Professors of the Hong Kong University, who have been appointed respectively Physician, Surgeon, and Obstetric physician to the hospital and who are responsible to the Director of Medical and Sanitary Services for the duties they perform in the hospital. They have also been appointed consultants to Government. The University Clinic do all the outpatient work except that connected with the Eye Clinic and Venereal Diseases Clinic which are attended to by the Government Specialists.
- 283. Dr. D. J. Valentine, M.C., was Medical Officer in charge until 29th January, 1935, when he was relieved by Dr. L. D. Pringle. Dr. I. Newton took over the duties on 3rd April, 1935, and continued in the office until the end of the year. Dr. G. H. Thomas, Dr. A. D. Wong and Dr. S. F. Cheung were assisting.
- 284. The number of inpatients, exclusive of those in the maternity block, was 5,047 (5,063 in 1934), of which 915 were treated by the University staff and 4,132 by the Government Medical Officers.

285. The 915 patients treated by the University staff were made up as follows:—

Medical cases	382
Surgical cases	407
Gynaecological cases	126

286. The daily average number of inpatients was 189 that for the previous year was 196.

287. The nationality of the patients was:—

- 288. A large proportion of the total patients receive treatment free of charge.
- 289. There were 425 deaths. The case death rate was 84.21 per mille (62.5 per mille in 1934).
- 290. 1,257 major operations were performed (1,273 in 1934). Of these 760 were from the University Surgical Clinic, 127 from the University Gynaecological Clinic and the remaining 370 were performed by the Government Medical Officers.
- 291. There were 1,403 accidents of a nature so serious as to require treatment as inpatients (954 in 1934).
- 292. Police Wards.—The total number of admissions and deaths were as follows:—

	Admissions.	Deaths.
British	89	
Russian shipguards	9	-
Indians	548	2
Chinese (Cantonese)	120	4
Chinese (Wei-hai-wei)	147	************
Total	913	6

293. The number of Government Servants treated by the Government Medical Officers as outpatients was 9,942.

294. Outpatients.—Outpatients are treated both in the general block and in the special outpatients department. The number of attendances, exclusive of Venereal Diseases cases, was 106,435 (32,478 in 1934). The number of prescriptions dispensed was 79,727 (63,224 in 1934). The number of vaccinations was 1,586, and the number of dog-bite cases treated was 202.

Maternity Bungalow at the Government Civil Hospital.

- 295. The Bungalow has accommodation for twenty-one patients and is mainly for the use of Asiatic women.
- 296. There are three general wards with a total of sixteen beds, two private wards with two beds each and one isolation ward with one bed.
- 297. The majority of patients are under the care of the Professor of Obstetrics of the University, he being at the same time Obstetric Physician to the Government Civil Hospital.
- 298. The admissions during the year were 1,041 (939 in 1934), making a total of 1056 cases treated. There were altogether 951 deliveries of which 193 cases were under the care of the Government Medical Officers and 758 under the Professor of Obstetrics and his Assistants.
- 299. The daily average number of patients in the hospital was 19 excluding infants.

300.	. The Nationalities of the patients were as	follows:—	
	Malay	1	
	Portuguese	1	
	Japanese	17	
	Indians	72	
	Chinese	965	
		050	

Total 1,056

- 301. There were eight Maternal deaths. Twenty-nine infants were stillborn.
- 302. The reports of the Professors in charge of the various University Clinics will be found in Appendix D.

The Mental Hospital.

303. The Mental Hospital which is an annex to the Government Civil Hospital has accommodation for 14 Europeans and 18 Asiatics.

- 304. This institution is intended for use only as a temporary abode for the mentally affected pending arrangements being made for their transfer to Europe or Canton.
- 305. The Medical Officer of the Government Civil Hospital is in administrative charge.

Patients.		
Remaining from 1934	40	
Admissions during the year	310	
-		350
Discharged apparently cured	91	
Discharged relieved	-75	
Transferred to the Canton Mental		
Hospital	138	
Died	3	
Remaining at end of 1935	43	
_		350

Daily average number of patients 50.3.

VICTORIA GENERAL AND MATERNITY HOSPITAL.

- 306. The Victoria Hospital which was originally built for the accommodation of women and children is now a general and maternity institution. Situated in the residential area well above the level of the town it has a clear view across the harbour of Kowloon and the hills beyond. There are 46 general beds and 26 maternity beds.
- 307. Dr. J. E. Dovey was Medical Officer in Charge throughout the year.
- 308. During the year 490 cases were treated, 424 in the General Block and 66 in the Maternity Block. The patients treated in the General Block were men 70, women 184 and children 170. There were 4 deaths.
- 309. The daily average number of patients exclusive of maternity patients was 14.2.

310. The Nationality of those treated was:—	
European	384
Chinese	12
Other nationalities	28
Total	424

The Maternity Block.

- 311. The Maternity Block which stands in its own grounds has a separate staff. Private Practitioners have the privilege of making use of this institution for the treatment of their cases.
- 312. The admissions to the hospital during the year were 65 of which 11 were patients of private practitioners. The corresponding numbers for 1934 were 65 and 8.
- 313. The daily average number of patients was 2.6 adults and 2.2 infants.
 - 314. There were 55 deliveries with no maternal deaths.

KOWLOON HOSPITAL.

- 315. This institution which is situated on an elevated site towards the base of the Kowloon peninsula occupies a portion of a hospital reserve of 30 acres.
- 316. This reserve will ultimately contain a five hundred bed general hospital, a mental hospital and an infectious diseases hospital.
- 317. The hospital is being built block by block as finances permit. At present it consists of three general blocks, a maternity block, an outpatients block, two sets of quarters for Medical Officers and two sets of quarters for Sisters and Nurses. There are 97 general beds and 34 maternity beds.
- 318. The new and up to date Outpatients Block was opened on March 11th. This building which measures 136' × 60' over all is divided into a major section for general diseases and a minor section for venereal diseases each with its own entrance. The main section contains a clerks office, a large waiting hall, consulting rooms, examination rooms, a laboratory and a dispensary. The venereal diseases section which is complete in itself comprises a waiting room, a clerks office, consulting rooms and treatment rooms. In addition to the general entrance there is a special one through which patients can pass from the general section for treatment without the nature of their ailments becoming known to others.
- 319. Dr. J. T. Smalley, Senior Medical Officer, was in charge during the year, assisted by Dr. G. V. A. Griffith, Dr. C. H. Luk, Dr. C. K. Yu and Dr. H. T. Bee. Dr. K. H. Uttley and Dr. G. H. Henry gave part time assistance.
- 320. The V. D. Clinic was in charge of Dr. J. A. R. Selby and the Eye Clinic in charge of Dr. G. M. Hargreaves.
- 321. The total number of cases treated in hospital was 3,077 as compared with 2,321 in 1933 and 2,536 in 1934.

322. The nationalities were made up as follows:—

	Males.	Females.	Total.
European	425	326	751
Chinese	1,521	534	2,055
Indians	11	12	2 3
Others	145	103	248
-	0.100	055	0.055
_	2,102	975	3,077
	2,102	975	3,077

- 323. The deaths numbered 202 of these 148 being Males and 54 being females.
- 324. The daily average number of patients was 90.2 (88.7 in 1934).
- 325. During the year 1,308 operations were performed under general anaesthesia (785 in 1934).
 - 326. The number of police admitted was as follows:—

Europeans.	Chinese.	Indians.	
70	173	1	

Outpatients Department.

327. The number of outpatients' visits recorded as compared with previous years were as follows:—

New cases Old cases Dressings	5,333	•	•	1934. 13,813 8,986 9,512	1935. 23,053 14,143 16,998
	21,897	25,727	27,810	32,311	54,194

In addition 1,120 vaccinations were performed (542 in 1934).

328. The number of prescriptions dispensed during the year was 30,159 (18,328 in 1934).

Maternity Block.

- 329. The number of beds is 34.
- 330. Admissions during the year numbered 657.
- 331. The daily average number of patients was 15.6.
- 332. There were 539 deliveries. There were 4 maternal deaths.

THE TSAN YUK MATERNITY AND GYNAECOLOGY HOSPITAL.

- 333. This hospital which was formerly administered by the Committee of the Chinese Western Dispensary, was handed over, as a gift, to Government on January 1st, 1934.
- 334. The administrative control is vested in the Medical Officer in Charge of the Government Civil Hospital, but all treatment both of inpatients and outpatients is carried out by the obstetrical and gynaecological unit of the University.
- 335. The total number of beds is 60, of which 46 are reserved for maternity cases and 14 for gynaecological patients.
- 336. The total number of cases treated was 1,772 of whom 34 remained from 1934 and 1,738 were admitted. There were 7 deaths.
- 337. The maternity cases numbered 1,541 of whom 1,412 were delivered. Seven Mothers and 29 infants died and there were 53 still-births.
- 338. The number of cases treated in the Gynaecological Department numbered 197. 126 operations were performed.
- 339. The following table shows the attendances at the Outpatient Department:—

Clinic	New cases	Return visits	Average attendance at clinic	Total 1934	Total 1935
Gynaecological	250 189	600 812 100 1,847	26.68 22.59 6.02 52.35	1,484 1,777 319 2,424	1,334 1,062 289 2,565
Total	1,891	3,359	26.91	6,004	5,250

THE GOVERNMENT INFECTIOUS DISEASES HOSPITAL.

340. This was originally a Police Station but was adapted as a hospital and has accommodation for 26 beds in six wards. The hospital is situated very close to the extreme western end of the Island and next door to the Tung Wah Smallpox Hospital. It is admirably situated for its purpose being more or less isolated yet convenient for access by ambulance, by bus, or by launch.

- 341. Dr. G. I. Shaw was in charge during 1935.
- 342. There was only one admission during the year and that was a case of Chicken-pox.

RADIOLOGY, MASSAGE AND ELECTRO-THERAPEUTICS.

- 343. Dr. F. J. Farr, Radiologist, was in charge of this branch during the year. He was assisted by Mr. J. Skinner, M.S.R, B.P.A. and Mr. J. Robertson as Radiographers, and Miss L. M. Siggins, C.S.M.M.G., B.P.A., and Miss M. H. Hughes, C.S.M.M.G., B.P.A., as Masseuses and Electrotherapeutists.
- 344. Schemes for training local pupils in massage and radiotechnique having been approved two probationer masseuse assistants and two probationer radiographic assistants were appointed.
- 345. Mr. Hong Ping Yuen, seconded from the Electrical Department, P.W.D., continued to act as technician in charge of X-Ray and Electrical apparatus. He was most successful in maintaining the apparatus in good condition and in expediting repairs.
- 346. The activities of this branch are carried out partly at the Government Civil Hospital, partly at Kowloon Hospital and partly at Victoria Hospital. Victoria Hospital has no X-Ray plant.
- 347. The work which has doubled in the last four years continues to increase. The following table shows the figures for each year:—

	1932.	1933.	1934.	1935.
Massage and electric treat-				
ments		10,579	12,947	18,077
Radiological examinations	2,696	3,076	3,991	4,897
Films exposed	4,521	5,477	8,208	8,577

- 348. Of the 4,897 radiological examinations 3,682 were done at the Government Civil Hospital and 1,215 at the Kowlcon Hospital as compared with 3,133 and 858 in the previous year.
- 349. The increase in the number of massage and electrical treatment cases was most marked at Kowlcon where the new rooms—provided at the expense of an already inadequate clinical accommodation—afforded better facilities for treatment than were formerly available.

350. The following table shows for comparison the figures at the three centres:—

	1934.	1935.
Kowloon	7,077	10,946
G. C. H	4,939	6,385
Victoria	931	746

- 351. On both sides of the harbour there is need for more extensive and more appropriate accommodation both for X-Ray work, for massage and for electro-therapy. The new Queen Mary Hospital will provide the necessary accommodation on the Island. A new block at Kowloon is urgently required.
- 352. Three new X-Ray machines were installed during the year. One, a combined screening and radiographic unit is intended ultimately for use in the operating theatre of the Queen Mary Hospital. The other two sets are mobile units, one for Kowloon Hospital and the other for Queen Mary Hospital.
- Metalix "S.A." X-Ray tubes. These tubes appear to be more susceptible to the effects of excessive humidity than the earlier models, and two were rendered useless from electrical faults during the year. The installation of the mobile unit at Kowloon Hospital was delayed by these breakdowns and a "Victor" X.P.3. tube was eventually fitted. This tube has not yet had sufficient trial, but results have been very satisfactory.
- 354. The routine use of X-Ray paper was continued for suitable cases. A total of 3,576 sheets were exposed resulting in a saving of £199.10.0 the difference between the cost of the paper and the cost of films.
- 355. Considerable use was made of the Radium lent by the Matilda Hospital Authorities. It is a matter for regret that the therapeutic value of this material was considerably reduced by the lack of modern X-Ray therapy.

VENEREAL DISEASES CLINICS.

- 356. There are four Government V. D. Clinics in the Colony. The first was opened at the Government Civil Hospital Outpatient Department in 1928, the second, an ad hoc centre at South Kowloon close to the docks, in April 1933, the third at Kowloon Hospital Out-patients Department in March 1935, and the fourth at the Violet Peel Health Centre in Wanchai district, Victoria, in September 1935.
 - 357. All treatment is given free of charge.

358. Clinics are held daily as follows:—

At the Government Civil Hospital:—
Monday.—5 p.m. for Europeans.
Monday and Wednesday.—10 a.m. for Chinese.
Tuesday.—9 a.m. for Europeans.
Thursday.—10 a.m. for Indians.
Friday.—10 a.m. for women only.

At the Violet Peel Health Centre, Wanchai:—
Wednesday.—10 a.m. for European males.
Thursday—2 p.m. and Saturday.—10 a.m. for Chinese males.
Thursday.—10 a.m. for females.
Friday.—10 a.m. for Indian males.

This Clinic is open daily from 9 a.m. to 12 noon and from 1 p.m. to 5 p.m. for the treatment of males and from 11 a.m. to noon for the treatment of females. A trained dresser attends to males and a trained nurse to females.

At the South Kowloon Centre near the docks:—

Monday.—10 a.m. & Thursday.—2 p.m. for Indians.

Monday.—2.30 p.m. for women only.

Tuesday.—10 a.m. & Friday.—2.30 p.m. for

Chinese males.

Tuesday.—2.30 p.m. & Saturday.—10.30 a.m. for

Europeans.

This Clinic is open daily from 8 a.m. to 12 noon and from 1 p.m. to 8 p.m. for the treatment of males and from 9 a.m. to 10 a.m. for the treatment of females. A trained dresser attends to male patients and a trained nurse attends to female patients.

At Kowloon Hospital:—
Tuesday.—2.30 p.m. for males only.
Friday.—2.30 p.m. for women only.

359. New cases treated in 1935:—

	Euro	peans	Chi	nese	Ind	ians	Otl	iers	Te	otal
1 100	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
G. C. H Violet Peel South Kowloon. Kowloon Hosp.	59 11 73 4	1 0 0 6	2066 96 969 186	638 150 561 114	96 16 73 8	1 1 3 1	4 3 17 4	2 0 3 1	2225 126 1132 202	642 151 567 122
	147	7	3317	1463	193	6	28	6	3685	1482

360. Number of Attendances in 1935:—

	Euro	peans	Chi	inese	Ind	lians	Ot	hers	То	Total	
	M.	F.	М.	F.	M.	F.	M.	F.	M.	F.	
G. C. H Violet Peel South Kowloon. Kowloon Hosp.	545 66 595 16	9 0 0 17	_	799 2228	1700 305 1294 48	1 9 20 —	20 14 95 6	4 0 7 3	5947	808	
100 100 100	1222	26	13083	6727	3347	30	135	14	18787	6797	

- 361. The 24 beds reserved for male V.D. cases at the G.C.H. were kept occupied during the year. There is an urgent need for beds for female patients and children.
- 362. A number of children diagnosed at Infant Welfare Centres to be suffering from venereal disease were referred to the V.D. Clinics for treatment. This was specially the case at the Violet Peel Welfare Centre where the Infant Welfare Centre and the V. D. Clinic occupied adjacent quarters under the same roof.
- 363. 7,941 specimens of blood were sent to the Bacteriological Institute for the Wasserman test. The results were as follows:—

	Males.	Females.	Total.
Strong positive	1,869	623	2,492
Positive	439	145	584
Weak positive	377	88	465
Doubtful	406	99	505
Negative	2,673	1,222	3,895
	5,764	2,177	7,941

364. 11,784 injections of N.A.B. and 1,359 injections of Bismuth were given to outpatients.

Staff.

365. Dr. J. M. Gray was in charge during the year. He was assisted by Dr. Cheung Kung Leung (Chinese Medical Officer) and Mr. A. Steven (Technical Assistant). The Government Chinese Lady Medical Officers, Doctors Lai, Ruttonjee and Cheng, assisted in the clinics for women. Miss Ivy Soong was nurse for the year.

INFANT WELFARE CENTRES.

365. The Infant Welfare Centres, two in number, have been described in Chapter V.

GOVERNMENT DISPENSARIES.

367. The Dispensaries maintained by Government during the year under review were the Taipo Dispensary, the Un Long Dispensary, the Ruttonjee Dispensary, the Lady Ho Tung Welfare Centre, the Sai Kung Dispensary and the Tai-O Dispensary, all in the New Territories. Details with regard to these will be found in Section X which deals with the New Territories.

THE CHINESE HOSPITALS (TUNG WAH GROUP) AND THE CHINESE PUBLIC DISPENSARIES.

- 368. The Chinese Hospitals and Chinese Dispensaries are institutions established by the Chinese for the benefit of the poor of Chinese nationality. Intended to be additional to, not in substitution of, the Government Hospitals they serve a very useful purpose not only in the matter of medical relief but in that of health education.
- 369. An enormous and ever-increasing number of sick too poor to pay a doctor's fee or to buy proper medicine, are successfully reached.
- 370. There are three general hospitals each with maternity wards attached, one smallpox hospital, one maternity hospital and nine public dispensaries.
- 371. They are maintained by subscriptions from the public, by donations from the Chinese General Charities Fund and by direct grants from Government. They are controlled by Chinese Committees who work in close co-operation with the Secretary for Chinese Affairs.
- 372. In the three general hospitals both Western Medicine and Chinese medicine are practised the former by graduates of the Hong Kong University the latter by a staff of local herbalists. The patient when entering is given the choice of treatment.
- 373. In the Smallpox Hospital all treatment is carried out by herbalists.
- 374. Western medine only is practised in the Chinese Public Dispensaries.
- 375. Both Hospitals and Dispensaries are subject to inspection by the Government Medical Department. There are four officers of the Department whose duty it is to visit the various institutions and to give advice and assistance. These officers work in close touch with the Secretary for Chinese Affairs.

THE TUNG WAH GROUP OF HOSPITALS.

- 376. The Tung Wah group of hospitals comprising the Tung Wah Hospital, the Tung Wah Smallpox Hospital, the Kwong Wah Hospital and the Tung Wah Eastern Hospital are Chinese institutions whose relation to Government has been established by Ordinance. They are subsidised by Government and are subject to inspection by certain Government officials.
- 377. The authority in administrative control is a Committee of Chinese gentlemen elected each year by the subscribers.
 - 378. The activities of the Chinese Hospitals include:—
 - (a) The care of the sick and treatment by Western methods or Chinese methods according to the wishes of the patients.
 - (b) Maternity benefits and infant welfare by Western methods only.
 - (c) Vaccination.
 - (d) Health propaganda.
 - (e) Assistance to the destitute.
 - (f) The provision of coffins for the burial of the dead.
- 379. Much progress has been made in all departments of the hospitals during the last few years. These improvements include:—
 - (a) The appointment of University graduates as full-time Resident Medical Officers.
 - (b) The foundation of training schools for female nurses.
 - (c) Extensions and improvements in the male nursing section.
 - (d) The establishment of clinical laboratories.
 - (e) The provision of radiological apparatus.
 - (f) The establishment of up-to-date operating theatres.
 - (g) The purchase of motor ambulances.
 - (h) Improvements in the accommodation for patients.
 - (i) Improvements in quarters for the staff.
- 380. Today each of the three Chinese Hospitals has a good operating theatre where operations are performed daily, many of which are major in character.
- 381. In charge of the medical side (Western) of each hospital is a Medical Superintendent, a graduate of the University, whose salary is paid by Government, and who is a member of the Medical Department.

THE TUNG WAH HOSPITAL.

- 382. The Tung Wah Hospital situated in the centre of the most thickly populated area in Victoria was founded by the Chinese in 1873 with the help and encouragement of the Government. It took the place of a Home for the Dying which had been conducted by charitable Chinese, and it was intended to provide treatment by Chinese herbalists, and accommodation in sanitary surroundings for the poor of the Chinese race. Originally intended for the accommodation and treatment of those Chinese whose fears and prejudices against Western Medicine prevented their applying for relief at the Government Hospitals, the Tung Wah at a later period introduced and encouraged scientific methods. As prejudice disappeared and confidence grew the demand for Western medicine increased until now the number being treated by this method equals that which still pins its faith to the plasters and decoctions of the herbalists.
- 383. In 1933 and 1934 the older and more insanitary of the buildings comprising the hospital were demolished and their place taken by structures of more modern design. A few old wards still remain but these will be replaced when financial circumstances permit of this being done.
- 384. In the present stage there is accommodation for 434 beds and this number will be increased when the back wings of the new six storey block are completed.
- 385. The new outpatients department is a great improvement on the old one.
- 386. Despite the difficulties caused by the slump and the consequent reduction of income the Directors not only maintained the standards left them by their predecessors but effected considerable improvements.
- 387. The outpatient departments both for western treatment and herbalist methods were transferred from the gloomy and unhygienic quarters formerly used to new premises well lighted and ventilated on the opposite side of the road.
- 388. The tuberculosis wards of the Yan Yan block having become vacant owing to the transfer of the patients to the Tung Wah Eastern Hospital opportunity was taken to convert them into quarters for nurses. This made it possible to accommodate the necessary number of nurses required by the hospital and to bring the number up to standard.
- 389. Special cooking places for the stewing of herbs to make infusions were constructed.

390. The staff consists of a Chinese Medical Officer of the Government Medical Department and three Assistant Medical Officers whose salaries are paid by the Hospital. There are in addition a number of Chinese Herbalists who practice Chinese medicine for the benefit of those who prefer that treatment.

391.	Inpatients (General).	
	Western Chinese Maternity treatment. treatment. Cases.	Total.
1934		12,471
1935	7,157 $4,984$ $1,833$	13,974
392.	There were 1,651 operations including 350 major	cases.
393.	Outpatients (General).	
	weatment. treatment.	Total.
1934	23,227 $159,511$ 18	82,738
1935		05,332
394.	$Eye\ Clinic.$	
	1934	
	1935	
395.	$Baby\ Clinic.$	
	1934 2,291	
	1935 2,523	
396.	Deaths. Brought in dead.	
	$1934 \dots 2,170 $ 687	
	1935 2,539 645	

397. A large proportion of the deaths in the Hospital occur within 24 hours of admission. The sick poor go there to die. Those brought in dead include bodies sent from ships in harbour, from neighbouring hospitals, from the Public Dispensaries and from private houses. All are taken to the Tung Wah for the benefit of free coffining and free burial.

THE KWONG WAH HOSPITAL.

- 398. This hospital does for Kowloon and the Peninsula what the Tung Wah and the Tung Wah Eastern do for the Island of Hong Kong. There is official accommodation for about 326 beds, of which 229 are for general diseases, 40 are for tuberculosis cases and 59 are for maternity cases. There are 18 private wards including 7 for maternity cases.
- 399. The accommodation cannot keep pace with the growth in population. Kowloon has considerably more than doubled itself during the last ten years. No patient is turned away for want of room and in both medical and surgical wards it is common to find two in a bed, and others sleeping on the floor.

- 400. The staff consists of a Chinese Resident Medical Officer whose salary is paid by the Government, and three Assistant Medical Officers paid by the Directors.
- 401. There are also a number of Chinese Herbalists who practise Chinese medicine and are paid out of Hospital funds.

402.	Inpatien	ets.		
		Chinese treatment.		Total.
1934	5,902	2,883	4,406	13,191
1935	7,365	3,364	4,439	15,168

403. There were 408 operations, including 160 major ones.

404. Outpatients.

	$We stern \\ treatment.$	Chinese treatment.	Total.
1934	. 45,934	138,745	184,679
1935	. 47,700	162,779	210,479

- 405. There were 3,590 eye cases as compared with 3,813 for the previous year.
- 406. The number of deaths in hospital was 4,075 of which 1,646 were admitted in a serious condition and died within 48 hours.
- 407. There is a small laboratory where facilities are available for ordinary routine microscopic examination.
- 408. A children's clinic is held twice a week. The attendance numbered 5,288 as compared with 2,670 in 1934.
- 409. There is also an antenatal clinic held once a week in the Maternity Block. The number of cases seen was 110.

THE TUNG WAH EASTERN HOSPITAL.

410. This hospital is situated at the eastern part of the City of Victoria. It was built in 1929: and overlooks the Sookunpo Valley playing-fields. It has modern fittings and equipment. All the wards have through ventilation and there is a modern well-lighted operating theatre. It has accommodation for 236 beds, of which 194 are for general, 14 for maternity and 28 for tuberculosis patients. A ward of 14 beds has been closed temporarily.

411. The staff consists of a Chinese Medical Officer whose salary is paid by Government, and two Assistant Medical Officers appointed by the Directors. There are also herbalists.

412.	Inpatients.		•
	$Western \ Chinese \ treatment. \ treatment$		Total.
1934	3,050 2,528	954	6,532
1935	4,847 2,185	1,154	8,186
413.	Major Operations under		
	$General\ Anaesthesia.$		
	1934	186	
	1935	127	
 414.	Outpatients.		-
	Western treatment. t	Chinese treatment.	Total.
1934	22,117	58,954	81,071
1935		61,358	89,480
415.	Vaccination.		
7	1934	854	
	1935	438	

- 416. Two wards have been set aside (one male and one female) for patients who are able to make some payment but who cannot afford a private room. The charge in these wards is \$1.40 per day including food and medicine. Each patient can, if he desires, bring in an attendant to help in looking after him. There are 14 beds in the Male ward and 8 in the Female.
- 417. There are 24 small private wards where the inclusive fee per day is \$3.00. The wards are popular.
- 418. A ward of 12 beds has been reserved for the treatment of opium addicts. These patients are mostly business men who find they cannot afford the luxury of opium in these days of depression. They appear to be earnest in their desire to rid themselves of their handicap. The course of treatment is usually complete within three weeks. The cost is defrayed by Government. During the year 441 patients were treated.
- 419. Deaths in 1934 numbered 1,661. A large proportion of these (935) died within 24 hours of admission. 755 bodies were brought in for burial.

THE TUNG WAH SMALLPOX HOSPITAL.

- 420. The Tung Wah Smallpox Hospital, erected in 1902 for the herbal treatment of smallpox cases, consists of six wards arranged in three two-storied blocks and faced by another group of three two-storied blocks intended for staff quarters and for administration purposes.
- 421. At a distance and separated by a yard are the kitchens, the servants' quarters and the mortuary. The whole is contained in a large compound.
- 422. This hospital at the time of its construction was considered to have all the requirements necessary for the proper treatment of smallpox cases by Chinese methods.
- 423. There is room for 60 cases without overcrowding but there is no arrangement for heating the wards and no water carriage system.
- 424. The staff consists of a Chinese coolie as a caretaker and an amah. There is no resident doctor and no clerk and there are neither dressers nor nurses.
- 425. Considered to be a herbalist hospital it is seldom visited by any of the Western-trained Tung Wah staff, and for all practical purposes it is controlled by the caretaker. There being no trained staff resident and the control being such as it is theremust be grave doubts regarding the efficiency of the disinfection processes and the means taken to prevent dissemination of disease by patients, contacts and formites.
- 426. When there are any patients requiring his attentions a herbalist from the Tung Wah visits daily and prescribes infusions but there is no attempt at nursing. Certain hospital clothing is provided but the patients as often as not wear their own clothes.
- 427. 7 cases of smallpox were admitted during the year. There was 1 death.
- 428. There can be no doubt that conditions at this so called hospital are most unsatisfactory both from the point of view of the public and the patients. For some time past it has been badly upkept and it is now in a very delapidated state and unworthy to be called a hospital. As an institution for the segregation and treatment of the infectious sick it has outlived its usefulness and is now obsolete.
- 429. There being in the Colony no accommodation for the housing of lepers the Directors consented to Government temporarily using a portion of the institution as a refuge for these unfortunates. Since May, 1935, it has been so used.

THE CHINESE PUBLIC DISPENSARIES.

- 430. The origin of the Chinese Public Dispensaries was a movement made in 1904 by certain leading Chinese citizens to stop the practice of dumping dead bodies by providing receiving houses for the sick and for the dead which would act also as information bureaux where the poor could obtain advice and assistance in matters connected with:—
 - (a) the removal of patients to hospital.
 - (b) certification as to cause of death.
 - (c) removal of corpses to mortuaries.
 - (d) supply of coffins and arrangements for burial.
 - (e) the registration of births.
 - (f) vaccination.
- 431. In 1905 two depots were established, the Western and the Eastern, under a Committee, consisting of the Chairman of the Tung Wah Board of Directors and two unofficial Chinese members of the Sanitary Board.
- 432. In immediate charge of each depot was a Chinese doctor qualified in Western medicine and his staff consisted of an English-speaking clerk and a number of subordinates.
- 433. In 1908 the movement ceased to be connected with the Tung Wah and the Committee became the Chinese Public Dispensaries Committee under the Chairmanship of the Registrar General, now the Secretary for Chinese Affairs.
- 434. It was declared at the time that the work of the depots or dispensaries was not hospital work and that the Chinese doctors employed were simply to diagnose disease and not to treat it. However, treatment centres were needed and treatment, commenced in a small way, gradually developed until now the principal function of the dispensaries is medical relief.
- 435. It is worthy of note that as far back as 1896 a Commission appointed by Government to advise regarding the Medical Department recommended the establishment under Government control of dispensaries in different parts of Victoria and Kowloon. However, none were built and the Chinese Public Dispensaries today occupy the positions which under other circumstances would have been filled by departmental institutions.
- 436. There are now nine Chinese Public Dispensaries, five on the island of Hong Kong and four in Kowloon. The Tsan Yuk Maternity Hospital, which was formerly administered by the Committee of the Chinese Western Dispensary, was handed over to Government as a gift on January 1st, 1934.

- 437. Two of the Dispensaries are still housed in rooms attached to temples. Another, that at Aberdeen, consists of two rented shops temporarily adapted for the purpose. Gradually however up to date buildings are taking the place of the temporary ones. The Dispensaries at Shaukiwan and Wanchai are excellent buildings of their kind, as are also those at Yaumati and Kowloon City.
- 438. A new dispensary is in course of erection at Shamshuipo a little distance from the existing building.
- 439. The dispensary in the highly congested central area of Victoria is inadequate for present day requirements.
- 440. Once a week at each of the Dispensaries a gynaecological clinic is held by one of the Government Lady Medical Officers. In some there are two clinics a week.
- 441. Investigations are carried out at the Government Bacteriological Laboratory for the various dispensaries. The work consists largely of examination of bloods for malaria.
- 442. Very good propaganda work was done during the year by four "street orators" appointed by and paid by the Chinese Public Dispensaries Committee for the purpose of spreading the gospel of public health to the people. They rendered valuable service to the police by lecturing and distributing pamphlets during the "Safety First" campaign held at the beginning of the year.
- 443. Situated in the most thickly populated districts these dispensaries fulfil a most useful purpose, not only in the treatment of disease but also as foci for the spread of knowledge concerning the cause of disease, the means of spread and the value of Western drugs and methods both in prevention and cure.
- 444. Each dispensary is an official registery office for the births occurring in the district served by it. During the year 16,500 births were registered at Dispensaries.

Last but not least, each dispensary has a room attached to it where dead bodies can be received for transport to the mortuaries preliminary to burial. Coffins are provided free.

SUMMARY OF WORK DONE IN THE DISPENSARIES DURING 1934.

				1/1								
Gynaecological Cases seen by Lady Doctor.	Old cases.	629	606	1	1,288	315	1,832	1,861	359	898	8,111	5,528
Gynaec Cases Lady	New cases.	311	541		801	308	1,508	885	449	434	5,237	4,730
Vaccina-tions.		4,990	6,183	6,229	9,231	1,039	11,896	13,877	1,766	5,682	60,893	54,283
Dead infants brought	to Dis- pensary.	41	202	304	242	1	133	270	33	135	1,360	1,471
Corpses removed from Homes	for free burial.	15	20	24	က	-		13	5	7	115	81
Patients removed to Hos- pital	by Am- bulance.		12	හ	П	ත	27		11	9	64	99
Patients sent to	Hospital.	ı	ಹ	7	62	54	128	37	43	55	391	422
Certifi- cates of	death.	111	13	31	18	-	46	9	12	56	193	237
Patients.	Old cases.	34,247	19,554	17,242	46,885	6,371	37,396	21,726	810	10,312	194,743	159,932
Pati	New cases.	34,056	17,526	23,868	26,022	8,705	48,002	35,436	3,540	20,656	217,811	188,885
Dispensaries.		Central	Eastern	Western	Shaukiwan	Aberdeen	Yaumati & Harbour	Shamshuipo	Hung Hom	Kowloon Gity	Total for 1935	Total for 1934

WORK DONE AT THE GYNAECOLOGICAL CLINICS.

1934 1935 1934 1935 1934 1935 1934 1935 48 49 648 990 257 311 42 43 1,164 1,450 549 541 98 101 1,781 2,089 817 801 99 99 2,776 2,340 1,400 1,508 94 89 2,211 2,746 877 885 44 42 594 808 325 449 49 48 561 1,302 234 434 525 520 10,258 13,348 4,730 5,237	G 9 D	No. of Clinics	Clinics	Total	No.	New Cases	Cases	Old	old Cases	Average ance p	Average attendance per day.
48 49 648 990 257 311 42 43 1,164 1,450 549 541 98 101 1,781 2,089 817 801 51 49 523 623 271 308 99 99 2,776 2,340 1,400 1,508 94 89 2,211 2,746 877 885 94 44 42 594 808 325 449 37 49 48 561 1,302 234 449 49 48 561 1,302 234 434 40 525 520 10,258 13,348 4,730 5,237		1934	1935	1934	1935	1934	1935	1934	1935	1934	1935
42 43 1,164 1,450 549 541 98 101 1,781 2,089 817 801 51 49 523 623 271 308 99 99 2,776 2,340 1,400 1,508 94 89 2,211 2,746 877 885 9 48 42 594 808 325 449 9 48 48 561 1,302 234 434 9 48 525 520 10,258 13,348 4,730 5,237	Central	48	49	648	066	257	311	391	629	13.5	20.2
98 101 1,781 2,089 817 801 51 49 523 623 271 308 99 99 2,776 2,340 1,400 1,508 94 89 2,211 2,746 877 885 37 44 42 594 808 325 449 49 48 561 1,302 234 434 525 520 10,258 13,348 4,730 5,237	Eastern	42	43	1,164	1,450	549	541	615	606	27.7	34.0
51 49 523 623 271 308 99 99 2,776 2,340 1,400 1,508 94 89 2,211 2,746 877 885 95 44 42 594 808 325 449 95 48 561 1,302 234 434 96 525 520 10,258 13,348 4,730 5,237	Shaukiwan	86	101	1,781	2,089	817	801	964	1,288	18.2	20.7
99 99 2,776 2,340 1,400 1,508 94 89 2,211 2,746 877 885 44 42 594 808 325 449 49 48 561 1,302 234 434 525 520 10,258 13,348 4,730 5,237	Aberdeen	51	49	523	623	271	308	252	315	10.3	12.7
94 89 2,211 2,746 877 885 44 42 594 808 325 449 57 49 48 561 1,302 234 434 - 525 520 10,258 13,348 4,730 5,237	Yaumati	66	66	2,776	2,340	1,400	1,508	1,376	1.832	28.0	33.7
35 44 42 594 808 325 449 37 49 48 561 1,302 234 434 37 49 48 561 10,258 13,348 4,730 5,237	Shamshuipo	94	83	2,211	2,746	877	885	1,334	1,861	23.5	30.9
49 48 561 1,302 234 434 - 525 520 10,258 13,348 4,730 5,237	Hung Hom	44	42	594	808	325	449	569	359	13.5	19.2
525 520 10,258 13,348 4,730 5,237	Kowloon City	49	48	199	1,302	. 234	434	327	898	11.4	27.0
	Total:	525	520	10,258	13,348	4,730	5,237	5,528	8,111	18.26	24.8

SECTION VII.

Prisons.

- 445. The principal prison in the Colony is Victoria Gaol where there is accommodation for 650 males. At Lai Chi Kok on the Kowloon side of the Harbour is the Lai Chi Kok Prison where there is accommodation for 640 males. The Female Prison is situated near to the Lai Chi Kok Prison and has accommodation for more than 100.
- 446. All male prisoners are admitted to Victoria Gaol where they are carefully examined by the Medical Officer. Some, including all who are not passed as medically fit, remain in Victoria, others are transferred to Lai Chi Kok. Female prisoners go direct to the Female Prison.
- 447. The total number of admissions to all prisons was 16,140 of which 13,175 were males and 2,965 females. Of these 1,353 males were fifty years of age or over.
- 448. In Victoria Gaol there is a small hospital of 30 beds. At the Lai Chi Kok Prison there are 12 beds for non-serious cases, serious cases are transferred to Victoria Gaol Hospital. The Female Prison has 9 beds for sick cases.
- 449. For cases which require special treatment there are prison wards in the Government Civil Hospital and in the Kowloon Hospital.
- 450. 38 cases were transferred to the Government Civil Hospital (15 for X-ray examination) and 6 to the Kowloon Hospital (3 for X-ray examination) for treatment not available in the Prison Hospital, while 10 cases were transferred to the Mental Hospital.
- 451. There were 25 deaths amongst the male prisoners and 3 amongst the females. The causes of death were:—

Pulmonary Tuberculosis	17
Dysentery	2
Disseminated Tuberculosis	1
Acute Bronchitis	1
Septicaemia	1
Broncho-pneumonia	1
Aortic valvular disease of the heart	1
Myocardial degeneration	1

- 452. During the year there were 3 executions.
- 453. 9 male prisoners were released on medical grounds, 6 of whom were lepers, one female prisoner was released on account of pernicious anaemia.

REMAND HOME FOR JUVENILES.

- 454. The Belilios Reformatory, which for many years had been used for other purposes, was on the 20th November, 1932, re-occupied as a Remand Home for Juveniles.
- 455. There were 39 boys remaining in the home at the end of 1934 and 1,864 were admitted during the year, making a total of 1,903 of whom 34 remained at the end of 1935.
- 456. The Prison Medical Officer visits the home weekly and at other times, if required.
- 457. The general standard of health of the inmates was good. 363 boys were vaccinated on admission. 146 cases of minor injury and sickness were treated in the Home and 30 cases were sent to the Government Civil Hospital. Scabies, 59 cases, was the commonest ailment treated. The majority of the remaining cases were minor injuries and septic skin infections.

Prison.	Total Prisoners Admitted.	Daily Average No. of inmates.	Total admissions to Hospital.	Daily Average No. of pri oners, in hospital.	Total Outpatients.	Daily Average number of outpatients.	Deaths due to disease.	Death rate i.e. % of deaths to total admissions to prison.
DAR TOTAL								
Victoria (Male)	13,175	980	1,149	23.64	19,918	67.29	25	0.19
Lai Chi Kdk (Male)		642	423	8.48	5,006	13.72	1	0.0076
Lai Chi Kok (Female)	<u>2,965</u>	174	162	4.48	2,494	6.83	1	0.034

All male prisoners are admitted to Victoria Gaol in the first instance and no prisoner is transferred to Lai Chi Kok unless he is passed medically fit.

Serious cases from Lai Chi Kok are transferred to the Victoria Gaol Hospital for treatment.

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SECTION VIII.

Meteorology.

- 458. Situated just within the northern limits of the tropics occupying an insular position immediately to the south of the great land mass of China, Hong Kong's climate is very materially influenced by the direction of the prevailing winds.
- 459. The North East Monsoon blows from November to May and during this period the weather is dry, cool and invigorating. From May until October, the season of the South West Monsoon, the air is highly charged with moisure and the climate is hot.
- 460. The mean annual temperature is 72°F. During the summer months the average maximum temperature is 87°F. and there is little difference throughout the twenty-four hours. Situated on the north side of the Island the City of Victoria gets all the heat and moisture of the South West Monsoon but not the breeze itself which is cut off by the mountain behind the town. During the winter months the range of temperature is from 70°F. to 45°F. with an average of 66°F.
- 461. The table on the following page gives the means or totals of the meteorological data for the several months of the year 1935. The data for this table were kindly supplied by the Director of the Royal Observatory, Hong Kong.

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METEOROLOGICAL DATA.

Miles p.h. Velocity. 11.7 Wind. Direction. EANN SSW SW/W ENE ENE NE/NE Points. 田 The following Table I gives the means, totals or extremes of the Meteorological Data for the several months of the year 1935. 1.090 1.130 4.665 2.455 4.735 14.425 29.210 6.030 7.370 5.815 0.355 1.040 71,320 Rain. ins. Cloudiness Sunshine. 106.2 109.2 106.6 77.2 143.1 154.1 157.6 217.8 153.4 184.9 173.9 1,714.3 hours. 74 p.c.0.68 0.42 0.54 0.54 0.05 0.09 0.09 0.92 0.80 0.60 0.60 Abs. ins. Humidity. 82 p.c.Rel. Absolute Min. 47.0 556 6 556 7.0 68.2 76.0 77.0 77.0 70.0 70.0 70.0 74.4 46.7 42.9556.8 57.9 57.9 57.9 57.8 57.8 57.8 57.8 57.8 56.3 56.3 69.0 Mean Min. Temperature. 60.0 66.1 66.1 77.3 82.1 82.1 82.1 77.7 77.7 60.4 72.4 Mean.64.3 057.7 711.3 74.3 88.9 88.9 88.0 68.0 65.1 65.1 77.1 Mean Max. $Absolute\\ Max.$ 75.7 76.6 882.2 885.5 890.2 991.2 991.2 889.0 78.0 92.7 at M.S.L. Mean. Barometer 30.17 30.11 30.11 30.02 29.92 29.77 29.77 29.83 29.88 30.09 30.18 29.94 ins. May June July August September or extreme Mean total November February March April December Month. January October

SECTION IX.

Scientific.

A.—BACTERIOLOGICAL INSTITUTE.

- 462. The activities of the Institute include: -
 - (a) the preparation of vaccine lymph.
 - (b) the preparation of anti-meningococcic serum.
 - (c) the preparation of bacterial vaccines.
 - (d) the preparation of anti-rabic vaccine.
 - (e) examination of pathological material.
 - (f) examination of waters, milks, etc., etc.
 - (g) medical research.
- 463. The Institute is under the charge of the Government Bacteriologist who is assisted by the Assistant Bacteriologist, one Chief Laboratory Assistant and five Laboratory Assistants.
- 464. Particulars of the work done during the year are contained in the Annual Report of the Bacteriologist which is appended.

B.—THE PUBLIC MORTUARIES.

- 465. There are two public mortuaries, one being situated in Victoria and the other in Kowloon.
- 466. At these places for the reception of the dead are received:—
 - (a) bodies from the Chinese Hospitals and Chinese Public Dispensaries for diagnosis.
 - (b) bodies forwarded by Convents which have received them either moribund or dead, from relatives and friends.
 - (c) dumped bodies, that is to say, bodies which have been taken from the place of death under cover of the night and dumped in the streets or in the harbour to save the trouble and expense of burial. The great majority of these cases have died a natural death and there is no need for concealment.
 - (d) bodies sent by the Police for medico-legal examination.
 - (e) bodies sent by the Medical Officer of Health for examination for signs of infectious disease or for simple diagnosis.

- 467. In all cases where a diagnosis cannot otherwise be made a sectio cadaveris is performed.
- 468. All dead rats collected by the Sanitary Authorities are taken to the mortuaries for examination with regard to plague.
- 469. During the year both Mortuaries were in charge of Medical Officers who had been detailed for this work in addition to their other duties.

PUBLIC MORTUARY, VICTORIA.

470. Report on Post-mortem Examinations, 1935:—	
Number of examinations performed	2,133
Male bodies examined	980
Female bodies examined	1,152
Sex unknown owing to advanced decomposition	1
Claimed bodies sent from hospitals, etc	125
Unclaimed bodies mostly abandoned	449
Bodies of infants sent from Italian Convent	1,559
Number of Chinese bodies examined	2,125
Number of Non-Chinese bodies examined	8
Male. Female.	Total.
Number of bodies under 2 years of age 682 1,017	1,699
Number of bodies over 2 years of age 298 135	433
200	100
Bodies were received from the following sources:—	
Victoria	2,039
Shaukiwan District	65
	00
Other Villages	29
Other Villages	29

PUBLIC MORTUARY, KOWLOON.

471. Report on Post-mortem Examinations, 1935:—	
Number of examinations performed	3,107
Male bodies examined	1,785
Female bodies examined	1,306
Bodies of unknown sex (indistinguishable)	16
Claimed bodies sent from Hospitals, etc	68
Unclaimed bodies mostly abandoned	3,039
Number of Chinese bodies examined	3,094
Number of Non-Chinese bodies examined	13
Male. Female. Unknown.	Total.
Number of bodies under 2 years of age 1,338 1,107 6	2,451
Number of bodies over 2 years of age 447 199 10	656
Bodies were received from the following sources:—	
Kowloon District	2,815
Harbour Police	207
Elsewhere	85
Number of rats examined	97,575
Number found plague infected	Nil.

SECTION X.

THE NEW TERRITORIES.

Public Health and Sanitation.

- 472. The New Territories comprise the mainland between Kowloon and the Sham Chun River and a number of islands including Lantau which is larger than Hong Kong. The mainland is so indented by bays, harbours and coves that it may be said to consist of a number of irregular peninsulas many of which are almost islands. Both mainland and islands are of similar geological formation, being barren granite hills or mountains separated by fertile valleys.
- 473. For general administrative purposes the New Territories have been divided into two districts—North and South each under its District Officer. The Northern District which is chiefly mainland is approximately 200 square miles in extent. The Southern District has roughly 100 square miles of which 40 only are mainland, the rest being islands.
- 474. For the purposes of medical administration it has been found convenient to divide the Territories into a Western Medical District and an Eastern Medical District, the boundary line being the range of hills which extends from North to South and which separates the waters running East from those going West or South.
- 475. The Western District includes the West Coast and the South Coast with the hinterlands stretching back to the hills. The circular road crosses the boundary at the 3rd mile and at the 32nd mile. The islands of Tsing, Lantau, Cheung Chau and Lamma form part of this district.
- 476. The Eastern District includes the whole of the East Coast with its hinterlands.
- 477. Each medical district has approximately 150 square miles.
- 478. With regard to population the only information available is that contained in the Census Report where the figures refer to police districts only. The populations of the various villages in those districts are not known. The following is taken from the 1931 Census Report:—

Western Medical District.

Police District.	Population	ι.
Mainland:—		
Tsun Wan	. 5,335	
Ping Shan	. 12,660	
Au Tau	. 12,877	
Lok Ma Chau	. 4,377	
		35,249
Islands:—		
Lantau	. 7,409	
Tung Chung	, <u> </u>	
Cheung Chau (5,477 land, 7,045	,	
floating)	. 12,522	
		21,644
		56,893
Eastern Medical District.		
Eastern Medical District. Police District.	Population	ι .
Police District.	Population	ι .
Police District. Mainland:—	•	ι .
Police District. Mainland:— Sha Tau Kok	. 8,941	ι .
Police District. Mainland:— Sha Tau Kok Sheung Shui	. 8,941	ι .
Police District. Mainland:— Sha Tau Kok Sheung Shui Taipo	. 8,941 . 10,208 . 12,684	ι .
Police District. Mainland:— Sha Tau Kok Sheung Shui	. 8,941 . 10,208 . 12,684 . 4,346	ι .
Police District. Mainland:— Sha Tau Kok Sheung Shui Taipo Shatin	. 8,941 . 10,208 . 12,684 . 4,346	43,764
Police District. Mainland:— Sha Tau Kok Sheung Shui Taipo Shatin	. 8,941 . 10,208 . 12,684 . 4,346	
Police District. Mainland:— Sha Tau Kok Sheung Shui Taipo Shatin Saikung Islands:—	. 8,941 . 10,208 . 12,684 . 4,346	
Police District. Mainland:— Sha Tau Kok Sheung Shui Taipo Shatin Saikung	. 8,941 . 10,208 . 12,684 . 4,346 . 7,585	43,764
Police District. Mainland:— Sha Tau Kok Sheung Shui Taipo Shatin Saikung Islands:— Po Toi Group and Cheung Kwan O	. 8,941 . 10,208 . 12,684 . 4,346 . 7,585	
Police District. Mainland:— Sha Tau Kok Sheung Shui Taipo Shatin Saikung Islands:— Po Toi Group and Cheung Kwan O	. 8,941 . 10,208 . 12,684 . 4,346 . 7,585	43,764

^{479.} The population is grouped into villages which are situated mostly on the lower levels, viz., on the flats facing the sea or in the valleys leading up to and between the hills. Some of the villages are easy of access by rail or road but some are only reached after hours of walking and there are those which are only easily accessible by boat.

- 480. The rules and regulations governing village life are nowhere laid down in print but have been handed down from generation to generation. There are no heads of villages appointed by and responsible to Government, for the conduct of village affairs, but there are "Village Elders" who are accepted as arbiters in petty disputes and who have acquired their position through age, experience, wealth or family rank. These elders have no executive power and are regarded by the villagers and by Government as advisers only.
- 481. From time to time co-operative efforts are made for the good of the community—some contributing money, some materials and some labour. In this way the paving of streets or paths, the construction of a bridge or the digging of a village well is brought about.

Public Health.

- 482. There are practically no public health laws in force in the rural areas of the New Territories. The Public Health and Buildings Ordinance of the Colony does not apply and there is no power to ensure notification, isolation or disinfection of disease cases. The Vaccination Ordinance applies but there has never been any compulsory vaccination.
- 483. Figures for diseases incidence during the years the New Territories have been under British jurisdiction are not available so that incident rates for particular diseases cannot be calculated. Such being the case the health conditions of the people can only be gauged by inspection and deduction.
- 484. Past reports of District Officers or of the Police make little mention of diseases or of deaths and the natural conclusion is that there was little out of the normal to note.
- 485. Enquiries made at the villages elicits little that can be called alarming. Some sick can be found but they are few compared with the number of healthy looking men, women and children one sees going about attending to their various occupations.
- 486. Near the hills there is a considerable amount of malaria but judging from the appearance of the people the number of chubby children and the lowness of the spleen rates the ravages of this disease are mild when compared with other tropical countries.
- 487. Abnormalities and accidents in connection with pregnancy and child birth must occur but from all accounts they are few in proportion to the numbers of normal cases.

- 488. Skin diseases there are, but judging from the returns of the dispensaries and travelling dispensary they are not very prevalent.
- 489. Trachoma varies with the village. In some it is common in others it is not.
- 490. With regard to Tuberculosis the population is mostly engaged in agriculture or fishing. The people as a whole live an open air life and Tuberculosis cases are not common.
- 431. Though made applicable to the New Territories in 1911 the Registration of Births and Deaths Ordinance was not enforced until 1932 and it was not until 1935 that death registration became sufficiently universal to warrant death rates being calculated. Assuming that all deaths were registered in that year the death rates for the different districts were as follows:—

Western Medical District.

Police District.	Deaths.	Death rate per mille population.
Tsun Wan	177	33.05 (24.06 if Shing Mun Dam population included).
Ping Shan	252	19.90
Au Tau	274	21.25
Lok Ma Chau	70	15.99
Lantau Island	183	24.70 (19.45 if boat population included).
Cheung Chau Island	194	15.44

Eastern Medical District.

Police District.	Deaths.	Death rate per	r mille po	pulation.
Sha Tau Kok	117	13.08		
Sheung Shui	. 175	17.43		
Taipo	. 270	21.28		,
Shatin		23.93		
Saikung		22.01		

492. Taking everything into consideration there is no evidence that the population of the New Territories is an unhealthy one.

The Medical Department's Organisation during 1935.

- 493. Under the scheme for medical expansion the New Territories were divided into Western and Eastern districts with headquarters respectively at Un Long and Taipo. Each district is in charge of a Chinese Medical Officer who is responsible to the Medical Officer of the New Territories.
 - 494. The duties of the District Medical Officer include:
 - (1) Supervision of the Government dispensaries in his district.
 - (2) Domiciliary visits to indigent cases too ill to attend the dispensary.
 - (3) Emergency calls for all classes.
 - (4) Accompanying the Travelling Dispensary three times a week visiting villages in the district.
 - (5) Reconnaissance and propaganda.
 - (6) Spleen surveys.
 - (7) Periodical visits to Police Stations.
 - 495. The Staff for the New Territories included:—
 - 1 European M.O. resident in Kowloon.
 - 1 Chinese M.O., 1 dresser and 1 nurse-midwife resident at the Government Dispensary at Un Long.
 - 1 Chinese M.O., 1 dresser and 2 nurse-midwives resident at the Government Dispensary at Taipo.
 - 1 First grade dresser attached to the Travelling Dispensary.
 - 2 Nurse-midwives at Lady Ho Tung Welfare Centre, Ku Tung.
 - 1 Nurse-midwife at Sai Kung.
 - 2 Nurse-midwives at Sham Tseng.
 - 1 Nurse-midwife at Tai-O.
- 496. The Shing Mun Dam area, where 2,000 workers were engaged on large construction works, continued to be a special medical problem—being under the Medical Officer New Territories for medical work and the Malariologist for anti-malaria measures.
- 497. The special staff for the Shing Mun Dam area included:—
 - 1 Chinese Medical Officer and three dressers for medical work.
 - 1 Chinese Medical Officer and two anti-malaria inspectors for anti-malaria works.

- 498. Fully equipped dispensaries were maintained at Sham Tseng, Un Long, Ku Tung, Sai Kung and Tai-O.
- 499. Dr. K. H. Uttley was the Medical Officer in charge of the New Territories throughout the year.

The Government Travelling Dispensary.

- 500. The Government Motor Travelling Dispensary was put on the road on the 16th of June, 1932. At first it visited all the villages on the road side once or twice a week, later, on representations from the voluntary aid societies, it ceased to call at the villages where they had established centres. The usefulness of this well equipped dispensary was thus considerably curtailed for the societies established centres in all the principal villages easy of access and there remained only the smaller hamlets. A Medical Officer and a dresser accompanied it on its rounds. There was a fixed itinerary and time-table so that the people should know where and when to expect it.
- 501. On Mondays, Wednesdays and Fridays it visited the Western District from San Tin to Shing Mun inclusive. On Tuesdays, Thursdays and Saturdays it visited the Eastern District from Sha Tin to Sha Tau Kok and back to San Tin inclusive. In this way there was a minimum of mileage and overlapping and a maximum of hours of work in the villages.

502. The following table shows the results obtained:

. No		
New cases	5,526	5,542
Old cases	•	1,900
Malarial cases		-865
Vaccinations	* Summing to	1,644

Sham Tseng Dispensary.

- 503. This dispensary, which had been built by Mr. Ruttonjee and presented to the Government, was formally opened on January 30th, 1934.
- 504. The resident staff consists of two nurse-midwives and an amah.
- 505. The Chinese M.O. of the New Territories (West) visits the Dispensary three times a week on his rounds with the Travelling Dispensary.
- 506. The following is a summary of the cases dealt with at the dispensary:—

	1934. ·		
New cases	1,549	1,631	1 6 12 2020
Old cases		3,117 271	
Vaccinations	123	271	ه د در د
Maternity cases	21 *	32	

Un Long Dispensary.

- 507. This unit consists of three shop houses side by side. Ultimately it will afford accommodation for a dispensary, an infant welfare clinic, a maternity ward and quarters for the staff. At present the quarters intended for the infant welfare centre and the maternity ward are utilised as a garage for the travelling dispensary and quarters for the dresser and driver.
- 508. The resident staff consists of the Chinese Medical Officer, one midwife and a dresser.
 - 509. The following table shows the cases dealt with:

	1934.	1935.
New cases	4,130	5,174
Old cases	3,998.	4,722
Vaccinations	1,417	1,343
Maternity cases	202	187

Lady Ho Tung Welfare Centre, Ko Tung.

- 510. This Centre was opened on the 14th of May, 1934. The staff consists of two nurse-midwives, an amah and a coolie. Lady Ho Tung also supplies a watchman. A daily visit is made by one of the District Medical Officers before he starts his round with the Travelling Dispensary.
- 511. Being situated in the open some distance from the nearest village a bus has been provided for the transport of cases.
- 512. The following are the cases dealt with during the year at the Centre:—

193	4. 1935.
New cases	23 3,067
Old cases 2,10	4,029
Maternity cases	33 139
Babies washed 49	25 537
Vaccinations	- 406

The Taipo Dispensary.

- 513. This unit consists of a dispensary, an infant welfare centre, and a maternity ward.
- 514. The resident staff consists of the Chinese Medical Officer, two nurse-midwives and a dresser.

- June has proved to be very popular. From its opening until the end of the year 85 cases were delivered. Many of the cases come from the boat population to whom it makes a special appeal. Contrary to expectations it has not caused any appreciable diminution in the number of midwifery cases treated in their own houses.
- 516. The following table shows the year's work compared with that of previous year:—

	1934.	1935.
New cases	5,581	5,874
Old cases	9,220	10,069
Vaccinations	2,538	2,062
Maternity cases (extern)	116	112

Sai Kung Dispensary.

- 517. In August 1934 a Government Dispensary was opened in Sai Kung, staffed by a nurse-midwife and an amah. It consists of the lower floor of a two-storey building near the centre of the village, the front part being the waiting-room and examination room combined, and the back portion being the nurse's and amah's quarters.
- 518. Sai Kung is a very difficult village to reach, and the journey occupies the Medical Officer's whole day. It is visited once a week by a Chinese Medical Officer.
- 519. The following is a summary of the work at the dispensary since it was opened on July 30th, 1934:—

	1934.	1935.
New cases	961	2,206
Old cases	1,333	3,127
Vaccinations	64	645
Maternity cases	40	119

The Tai-O Dispensary.

- 520. A Government dispensary was opened on 14.8.34 at the fishing village of Tai-O, situated at the West end of the Island of Lantau. A resident nurse-midwife was placed in charge.
- 521. Once a week the Chinese Medical Officer from Un Long visited and prescribed. Some of his patients come from distant villages.

522. The following is a summary of the work done during the years 1934 & 1935.

1934.	1935.
New cases 1,614	3,405
Old cases	2,985
Vaccinations 684	
Maternity cases 41	92

Shing Mun Dam Construction Works.
(Jubilee Reservoir).

523. The general health of the labour force employed on the construction of the Dam is shown in the following tables:—

Monthly Sickness Rate Table.

	19	3 4	. 19	3 5	
Month.	Population.	Percentage off duty owing to sickness.	Population.	Percentage off duty owing to sickness.	
January February March April May June July August September October November December	797 1,074 1,120 959 1,002 891 1,016 1,192 1,761 1,893 1,921 1,816	4.5 2.9 3.6 3.4 2.4 2.7 4.0 3.9 3.8 3.2 2.7 2.4	1,884 1,949 1,891 1,988 1,955 2,037 2,011 1,895 2,013 2,159 2,160 2,066	1.5 1.7 2.0 2.3 2.4 3.3 3.6 3.6 3.6 3.5 3.3	

Analysis of the Shing Mun Hospital Returns for 1935.

								-					
	January	February	March	April	May	Juna	July	August	September	October	November	December	Total
No. of malaria cases	49	17	21	11	24	87	141	107	98	123	218	89	985
Cases other than malaria	259	329	370	415	501	494	364	376	353	345	319	370	4,495
Deaths from malaria	1	********					1	1		1	5		9
Deaths from other causes	1	1	1	5	5	2	. 3	1	2		3	1	25
Admitted to S. M. Hospital.	29	15	_ 20	35	38	54	101	100	87	78	103	98	758
· Admitted to other hospitals.	7	2	1	5	10	9	8	4	7	5	2	7	67
Per cent ratio of malaria to total disease	15.8	5.1	5.4	2.6	4.8	17.6	38.4	22.1	21.7	15.6	68.3	24.0	
Per cent ratio of malaria to the	10.0	0.1	0.1	, A.O	2.0	1,.0	00.1				4		
total popula-	2.6	0.9	1.1	0.5	1.2	4.2	7.0	5.6	4.8	5.6	10.0	4.3	

New Territories Police Stations.

- 524. These have been inspected periodically by the M.O. i/c Kowloon and New Territories, and, in addition, the A.M.O.'s visit them once a month.
- 525. Many of the Police Stations are screened and every man is provided with a mosquito net. Prophylactic quinine is issued and the living rooms are regularly sprayed with an insecticide in an endeavour to kill any adult mosquitoes which may be present. The men on night patrol are of course exposed to the bites of mosquitoes. A table showing the incidence of malaria amongst the whole police force will be found in Appendix B.
- 526. During the past two years Quino-plasmoquine has been on trial at the Tsun Wan Police Station, the most malarious in the New Territories. The average number occupying this station was 13 viz.—1 European in charge, 10 Indians and 2 Chinese. The results were not conclusive.

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A. R. WELLINGTON, D. M. S. S.

APPENDIX A.

GOVERNMENT BACTERIOLOGICAL INSTITUTE.

Report for the year 1935.

By A. V. Greaves, M.B. (Tor.), M.C.P. & S., (Ont.), D.T.M., (Liverpool).

Introductory.

- (1) Administrative.—Dr. R. S. Begbie, Assistant Government Bacteriologist, was away on long leave from January 12th to November 14th. His duties at Victoria Mortuary were performed by Dr. G. I. Shaw, Medical Officer-in-Charge, Victoria Gaol.
- (2) Buildings and Equipment.—(a) Consideration has been given for a long time to the problem of providing more laboratory space at the Institute but owing to difficulties in finding room on the present site, no actual addition was found feasible. problem was partially solved this year by converting the media and sterilizing room on the ground floor into a replica of the laboratory workroom adjacent to it and turning a room in the basement formerly used for stores into a sterilizing and media making laboratory. The basement is far from ideal for the purpose but will answer nevertheless, while the extra laboratory space obtained on the ground floor is a great boon to us. By some re-arrangement generally we are to a large extent confining the routine work in clinical pathology to the two laboratories on the ground floor and utilizing the upstair laboratory for serology, vaccine making, lymph work, etc. This does away with a good deal of running up and down stairs on the part of the staff.

Certain alterations to the building were also made for the better accommodation of the Malariologist Bureau; these include the conversion of a portion of the eastern verandah to laboratory use, and the fitting up of a portion of the basement as a photographic dark room.

(b) Additions to the permanent equipment during 1935 include a Cenco Vacuum Pump and a large Seitz filter. Besides other uses these pieces of apparatus will be invaluable in the routine preparation of anti-meningococcic serum.

- (3) Library.—The following books were added to the library during the year:—
 - 1. A Text Book of Histology, E. V. Cowdry, 1935.
 - 2. Applied Physiology, Samson Wright, 1934.
 - 3. Laboratory Diagnosis, Todd and Sandford, 1934.
- (4) Research.—(a) Typhoid fever. Results obtained in the routine use of clot culture in parallel with agglutination for enteric fever are again of sufficient interest to warrant comment. The figures for the year are as follows:—

Widal	positive-	-culture	positive 87)	
, ,	, ,	,,	negative 222	25
, ,	negative	,,	positive 9	20
, ,	doubtful	,,	,, 7	
,,	,,	,,	negative 49	
,,	negative	,,	,, 726	
		Total s	sera tested1,100	

Analysis reveals the fact that of the total of positive cases (325) no less than 16 or 4.92% were either negative or doubtful by agglutination but gave a growth on culture. This compares with 3.50% in 1934. Quite apart from this aspect of the case is the usefulness of the procedure as a check on the sensitivity and accuracy of the Widal by the use of the percentage quoted as a comparative standard. This percentage should (all other things being equal) not vary greatly from year to year. The routine use of the procedure would appear to be thoroughly warranted.

(b) Dysentery.—Strains of Flexner dysentery organisms have been typed regularly during the year following the work begun in 1932, and during the past two years 128 strains have been studied. These fall into the following groups.

1935.		Total of whole study
V	12%	9.5%
W	31%	29.5%
X	17%	15.0%
Y	2%	4.5%
Z	0	1.0%
ZX	14%	21.0%
Mixed	11%	10.0%
Inagglutinable .	13%	9.5%

The grouping shows a striking similarity to that of 1932-3, and it seems justified to combine the two series and thus obtain a composite picture of the incidence of the various types in Hong Kong. This is shown on the right of the table above.

- (c) Gonococcus vaccine.—A new and simple culture medium for the growth of the gonococcus for vaccine making is now in use and is proving a great boon; it consists essentially of an ordinary meat extract blood agar, but with two important differences; firstly, the agar base is adjusted to a pH of 7.8, and secondly, the sheeps blood is added directly as drawn without the addition of citrate, in a concentration of 5%. The yield obtained from the use of this medium is something like one third as great again as compared with the testicular extract blood agar previously used. The agar base has the added advantage of being made according to the formula of our routine agar medium and is therefore cheap and readily available.
- (d) Diphtheria.—The use of the tellurite-Loeffler medium for the isolation of the Klebs-Loeffler bacillus was continued in 1935, and we now have had two years experience with its use in parallel with plain Loeffler. As a result of this extended use, it has been decided that it is advisable to use both media routinely in parallel on all cases. Our records show that in 11 instances the plain medium missed cases which were positive on the tellurite medium, while in 31 instances the tellurite medium missed cases giving a growth on plain Loeffler. This would seem to show a lack of sensitiveness on the part of the tellurite medium but we are not quite satisfied on the point, and it is still being investigated. In any case the use of both media seems advisable.
- (5) General.—The summary of the tests performed speaks for itself regarding the increased use being made of the services of the Institute, the total number of examinations carried out again constituting a record. A good percentage of the increase is due to the enlargement of the activities of the Venereal Diseases Clinics, which send us an ever increasing number of sera; also to the larger number of blood films sent for the diagnosis of malaria, the latter not being due to any increase in the incidence of the disease so much as to the more healthy sign, namely, a lessened resort to the pernicious diagnosis of "clinical malaria".

The work of the staff was highly satisfactory. During the absence of the writer on long leave in 1934 and also during Dr. R. S. Begbie's absence for the greater part of 1935 much added work and responsibility fell on the shoulders of the Chief Laboratory Assistant, Mr. K. T. Leung, whose experience and sound knowledge proved of the greatest value.

A. PROTOZOOLOGY AND HELMINTHOLOGY.

(1) Blood films for malaria.—Four thousand six hundred and four films were examined for the presence of malarial parasites.

Examination of Blood Films for Malaria.

Parasites	European.	Indian.	Chinese.	Total.
Sub-Tertian Benign Tertian Quartan Unclassified Double Infection Negative	25	44 51 5 49 341	816 490 129 266 41 1,953	892 566 139 327 43 2,637
Grand total	419	490	3,695	4,604

- (2) Filaria.—Eight films were received with a specific request for examination for filaria; five were positive for embryos.
- (3) Faeces.—One thousand seven hundred and twenty-one specimens of faeces were examined for the presence of intestinal parasites and the cellular exudate of bacillary dysentery.

Examination of Stools for Intestinal Parasites.

	European.	Indian.	Chinese.	Total.
Ascaris	17	9	50	76
Clonorchis	8	2	62	72
Trichuris	11	6	21	38
Ankylostoma			28	28
Taenia			2	.2
Multiple infestation.	4	1	96	101
E. histolytica	2	1	16	19
Negative	642	125	618	1,385
Grand total	684	144	893	1,721

B. SEROLOGY.

(1) Serological Reactions for Syphilis.—Twelve thousand seven hundred and sixty-eight sera were tested.

A summary of the results is as follows:—

Strong Positive	27%)
Strong Positive Positive Weak Positive	6%	38%
Weak Positive	5%	
Doubtful	5%	
Negative	57%	

Examination of Blood Sera for Syphilis.

	Europęan.		Indian.		Сни	TOTAL.	
	M.	F.	M.	F.	M.	F.	
Strong positive. Positive Weak positive Doubtful Negative	18 15 9 12 199	2 1 24	92 48 50 58 367		2,247 509 439 425 3,392	993 230 156 150 3,331	3,352 802 655 645 7,314
Grand total	258	27	615	1	7,012	4,860	12,768

⁽²⁾ Agglutination tests.—One thousand one hundred and sixteen sera were examined for agglutination with various organisms as follows:—

AGGLUTINATION TESTS.

ORGANISMS.	EUROPEAN.		Indian.		CHINESE.		Total.
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	
B. Typhosus	22	99	3	14	286	676	
B. Para. A		121	• • •	17	5	957	} 1,100
В. ,, В	• • •	121	•••	17	4	958	
В. ,, С	• • •	• • •	• • •	•••	• • •	•••	•••
B. Dysenteriae	1	4	•••	• • •	• • •	• • •	5
B. Melitensis	• • •	3	• • •	2	• • •	1	6
B. Abortus	• • •	3	• • •	2	• • •	•••	5
Weil Felix							
reaction	•••	• • •	• • •	•••	•••	• • •	•••
Grand total	23	351	3	52	295	2,592	1,116

C. BACTERIOLOGICAL EXAMINATIONS.

(1) Faeces.—Four hundred and fifteen samples of faeces were cultured for the presence of enteric organisms. It will be noted that of the number cultured for dysentery organisms specifically, 36.29% gave a growth of B. dysenteriae.

The number of cases in which report for the presence of dysentery organisms is specifically asked for is however somewhat greater than the number which were actually subjected to culture, our custom being only to culture those stools which show the typical bacillary exudate. The remainder of these cases are shown under the head of Intestinal Parasites, for which they were examined routinely. In none of the cases quoted under this head (Bacteriological Examinations) were E. histolytica or its cysts found.

Looking at the figures in another way, if one takes the actual number of stools forwarded with a request for a diagnosis of "dysentery" (i.e. either bacillary or amoebic), in which presumably the clinical picture suggested such a diagnosis, we find as follows: of 702 specimens examined 67 were positive by culture for B. dysenteriae, a further 85 showed the typical bacillary exudate but failed to grow the organism, making a total of 152 cases in which the diagnosis may be assumed reasonably proved. Nineteen only showed the presence of E. histolytica or its cysts. Thus, of the 702 diarrhoeic cases, 21.65% were proved of bacillary origin and 2.70% amoebic; while of the proved total positives (171) the proportion of bacillary to amoebic was 88.88% and 11.11%. Even bearing in mind the obvious statistical weaknesses, the fact that these figures were obtained by highly skilled workers, checked in every instance, goes to show something of the true relative incidence of the two types of dysentery in Hong Kong.

The writer is in cordial agreement with the word of warning sounded by Scott recently (Tropical Diseases Bulletin, Vol. 32, Nov. 1935, Supplement) against the indiscriminate diagnosis of amoebic infection; clinical diagnosis is more often wrong than right and laboratory diagnosis should only be made by highly trained men.

The proportionate distribution of the positive cases is roughly the same as it was last year:—

В.	dysenteriae,	Flexner	77.61%
В.))	Shiga	5.97%
В.	,,	Schmitz	16.42%

STOOLS EXAMINED FOR ORGANISMS.

Organisms.	European.		Indian.		CHINESE.		TOTAL.
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	
Typhoid group	• • •	12	• • •	2	3	155	172
B. Dysenteriae (Group)	• • •	54	• • •	11		107	172
B. Dysenteriae (Flexner)	9	• • •	2	• • •	41	• • •	. 52
B. Dysenteriae (Shiga)	1		•••	•••	3	• • •	. 4
B. Dysenteriae (Schmitz)	3			• • •	8	• • •	11
B. Cholerae	• • •	1	• • •	•••	•••	3	4
Grand total	13	67	2	13	55	265	415

(2) Sputum.—Six hundred and sixty-six sputa were examined for the presence of b. tuberculosis.

Sputa Examined for Tuberculosis.

	European.	Indian.	Chinese.	Total.
Positive Negative		19 64	143 351	181 485
Grand .stal	89	83	494	666

- (3) Urine.—Three hundred and ninety-nine urines were examined routinely, chemically and bacteriologically.
- (4) Urethral and cervical smears.—Five hundred and fifty smears were examined for the diagnosis of gonorrhoea.
- (5) Nasal scrapings, etc.—One hundred and two examinations were made for the presence of b. leprae. Twenty-nine of these were positive.
- (6) Throat swabs.—One thousand two hundred and eight swabs were cultured for the presence of C. diphtheriae. The positive findings are much in excess of the normal. It is very likely that this is due to greater use being made of laboratory facilities rather than to an increased incidence of the disease.

THROAT SWABS EXAMINED FOR DIPHTHERIA.

	European.	Indian.	Chinese.	Total.
Positive	68		193	261
Negative	343	4	600	947
Grand total	411	4	793	1,208

(7) Cerebro-spinal fluids.—Two hundred and sixteen fluids were examined for meningococci. The number of positives (80) is almost exactly half the number recorded in 1934.

C.S.F. Examined for Meningococci.

	European.	Indian.	Chinese.	Total.
Positive	. 1		79	80
Negative	7	5	124	136
Grand total	8	5	203	216

(8) Miscellaneous materials.—One hundred and ninety-eight examinations were made under this heading. They call for no comment.

D. PREPARATION OF VACCINE LYMPH.

Owing to the large stock of lymph on hand no preparation was undertaken during the year. It is proposed to allow the present stocks to be reduced considerably before further replenishment. Such action is possible owing to improved methods of production which render more rapid replacement possible when necessary and thus the carrying of large reserves is avoided.

Space has been allotted to us in the new cold storage room at the Central Medical Stores for our stocks of vaccine lymph and other biological products. It is a great improvement and convenience in every way. We moved our stocks thither during the latter part of the year.

E. PREPARATION OF VACCINES AND SERA.

(1) Anti-meningococcus serum.—Serum was issued from our stocks to the amount of 3,000 c.c. In the early part of the year, there was issued in addition 2,040 c.c. of serum purchased during the shortage of 1934 from a proprietary house. The amount prepared during the year was 18,600 c.c., the total amount in stock being approximately 30,100 c.c. This brings our stocks up to the amount held at the time of the epidemic of 1932; during this period very nearly the whole of this amount was required for issue. Fortunately our experience shows that this serum retains its potency extremely well under cold storage conditions; thus it is possible to hold large stocks in reserve against the onset of an epidemic.

We have to record the loss of one of our ponies from injuries received while having his hoofs pared at the Jockey Club Stables. A new animal has been purchased in his place.

(2) Gonococcus vaccine.—The total amount issued was 5,540 c.c., made up as follows:—

This is approximately the same amount used during 1934.

(3) Anti-rabic vaccine.—The pious hope expressed in the previous Annual Report that the record of that year would not soon again be reached was doomed to be shattered, and we have again to report a new high point of activity in this Department. Canine rabies was still prevalent, moreover infection was present on the Island as well as on the Mainland. Of 44 animal brains examined, 12 were found to contain Negri bodies. Three fatal human cases occurred. The first received no treatment with prophylactic vaccine. The others died after receiving the routine course of vaccine. The policy being steadily pursued by this Institute in anti-rabic treatment is towards a higher concentration of brain substance as experience in larger centres appears to warrant it. In pursuance of this our dosage was raised in 1933 from 1% to 2%. In the coming year it is again proposed to increase the concentration of brain substance from 2% to 4% in the treatment of Class III and Class IV bites. This brings our treatment practically into line with that pursued by the Indian Institutes, whose results appear to warrant the increased dosage. Nevertheless some of the large Institutes in the East still use vaccines containing 1% and 2% of brain substance.

In Hong Kong we suffer the disadvantage of having no central treatment centre at which administration of vaccine could be carried out on the more seriously bitten cases. This is important in the proper classification of cases and in watching for and noting the early signs of "paralytic" reactions. To the best of our knowledge, no such accidents have yet occurred after the use of our vaccine.

Race incidence of cases.	Treatment not completed	Treatment completed	Total
Chinese	214	138	352
British	42	66	108
Portuguese	10	10	20
Indian	6	8	14
Russian	5	1	6
French	4	1	5
American	4	1	5
German	3	2	5
Japanese	2	2	4
Eurasian	3	0	3
Norwegian	2	0	2
Peruvian	1	0	1
Austrian	1	0	1
Spanish	0	1	1
Italian	0	1	1
Dutch	0	1	1
Unknown (outport cases)	0	5	5
Grand total	297	237	534

Total No. of doses issued 4,926.

(4) Autogenous vaccines.—Fifty-two autogenous vaccines were prepared, largely for Government medical institutions.

Vaccine & Serum.	Amount issued.
Gonococcus vaccine T. A. B. ,, Autogenous ,, Anti-meningococcus serum	52 vaccines

F. Examination of Water and Milk.

(1) Bacteriological analysis of water.—One thousand four hundred and seventy examinations of various waters were carried out. One hundred and thirty-one of these were from other-than the public supplies.

The public water supply during the year was up to the required bacteriological standards.

Unfiltered raw water	107
Filtered ,, ,,	107
Filtered and chlorinated water from service taps throughout the Colony.	1,125
Well water	11
Water from other than public supplies	120
Total	1,470

(2) Bacteriological analysis of milk.—Five samples in all were examined, one from a human source and the others from goats.

G. Medico-Legal Investigations.

Thirty-five examinations were made of materials sent by the Police Department; thirteen were for blood, twenty-one for seminal stains and one for classification of hair.

H. MORBID HISTOLOGY.

Two hundred and ninety-five specimens of tissue were reported on during the year. Eighty-seven were of tumours and the remainder of tissues of general pathological interest.

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Analysis of Clinical and Other Examinations.

	Total	Total
Nature of examination.	for	for
	1935	1934
(B. Typhosus		
5 ,, Paratyphosus A }	1,100	849
if g ,, B		
· 点:	T times a	
Weil Felix Reaction	-	2
B. Dysenteriae	5 6 5	
,, Melitensis, Abortus	6	3
		1
Serological Reaction for Syphilis		10,023
= g (Malarial Parasites	4,604	2,386
Filaria Blood count, etc.	. 8	23
Elood count, etc.	• 48	72
Bacillus Diphtheria (Naso-		
pharyngeal swabs)	1,208	712
Meningococcus (Spinal fluids) Typhosus, Paratyphosus, Cholera, etc. (Faeces)	216	308
Typhosus, Paratyphosus, Cholera,		
etc. (Faeces)		488
(Blood)	1,100	799
Ova of helminth	1,721	1.600
E. histolytica		1,600
Occult blood	37	27
Crubercie Dacinus		5
Tissue Sections	295	211
Sputa	666	631
Pus	52	50
Series	399	272
Smear for Gonococcus	550	594
Bat smears spleam etc. for B	102	79
Pus Urine Smear for Gonococcus ,, B. leprae Rat smears, spleen, etc., for B. pestis		
Animals for Rabies	44	$\frac{-}{64}$
Medico-legal Examinations		23
Bacteriological Examination of Milk	5	20 5
,, Analysis of Water	1,470	1,486
Rideal Walkers Test of Disinfectants	2	-
Autogenous vaccine prepared	52	33
Filter candles sterilized for domestic filters.	345	322
Miscellaneous	198	302
Total	27,463	22,271
		Tachka p. 24 d d 2 d Decigo

APPENDIX B.

Annual Report of the Work of the Malaria Bureau for the Year 1935.

by

R. B. Jackson, M.D., D.P.H., Malariologist.

Staff.

- 1. The staff consisted of the Malariologist, the Assistant to the Malariologist, five Inspectors and four coolies.
- 2. The services of two vaccinators were placed at the disposal of the Bureau. They assisted in the larval surveys, the identification of larvae, collecting of mosquitoes from habitations and in other work.

Scope of activities.

3. The activities of the Malaria Bureau included: -

I.

A general investigation of Malaria and other Mosquito borne diseases.

II.

General mosquito survey of the Colony and New Territories in order to determine what species exist, their life histories, and, as far as possible, their identification in the larval and adult stages.

III.

The catching of mosquitoes frequenting human habitations, cow byres, pigsties and goat pens, and the dissection of such anophelines as were found for malarial and filarial infections and for obtaining precipitine reactions.

IV.

Feeding experiments.

V.

Investigations as to the prevalence of malaria in certain areas and the conditions under which it was existing with a view to its abolition, and, in the case of Shing Mun Camp, Shek O, Tytam Tuk, the supervision of measures directed against anopheline larvae and mosquitoes.

VI.

Local mosquito surveys for the abatement of mosquito nuisances and the supervision of anti mosquito measures affecting Mount Kellet, Pokfulam and Shek O.

VII.

Anti-malaria measures at Shing Mun Dam. Investigation and prevention.

VIII.

The teaching of mosquitology and the instruction of inspectors in their work and other matters bearing on the subject.

IX.

Co-operation with Government Departments, the Military, Naval and Air Forces, public companies and private bodies in the investigation and eradication of Malaria.

I .- MALARIA AND MOSQUITO BORNE DISEASES.

Malaria.

- 4. Statistics for 1935 show that 400 deaths were ascribed to malaria in the Colony and the New Territories, this being 1.8% of the total deaths. The death rate per thousand for malaria is given as 0.41.
- 5. The bulk of the malaria appears to be caused by mosquitoes breeding in hilly country—(a) in fallow rice fields, (b) in rice cultivation in October and November, (c) in the flattish portions of certain hill streams, and (d) in irrigation ditches.
- 6. In the areas where the masses of the population reside, extensive training of hill streams has been carried out, and in consequence, as a rule, there are no facilities for the breeding of Anophelines but where such exist as in suburban and rural areas on the Island and Mainland, the possibility of malaria must always be reckoned with.
- 7. Certain hill streams seem to occasion little if any malaria, such as those crossing Island Road from its junction with Sassoon Road to Polfulam village, the streams which flow from the Peak Hotel to Pokfulam Reservoir, from the War Memorial Hospital to the sea, and from Aberdeen Reservoir to the sea.
- 8. As malaria is not a notifiable disease, rates cannot be given for the general population.

- 9. No cases of blackwater fever were reported.
- 10. In Table I, figures are given regarding admissions, supplied by the following Hospital:— Government Civil, Kowloon, Victoria, Victoria Gaol, Laichikok Gaols (male and female), Tung Wah, Tung Wah Eastern, Kwong Wah, Matilda, Alice Memorial, War Memorial, Ho Mui Ling, and Hong Kong Sanitorium. The malaria admissions are arranged according to the quarters of the year and to methods of diagnosis.
- 11. In Table II, statistics are shown of cases treated, supplied by the following Dispensaries:—Central, Western, Shaukiwan, Aberdeen, Eastern, Yaumati, Hunghom, Shamshuipo, Kowloon City, Tai Po, Un Long, Sai Kung, Tai O, Ruttonjee, Lady Ho Tung Welfare Centre.
- 12. Table III deals with Hospital admissions of Government servants (excluding coolies) in relation to admissions for malaria.
- 13. Table IV is a similar table for Police, including Water Police. Certain stations are situated in areas where malaria is unlikely to be contracted, others in rural areas where night patrol work adds to the risk of infection.
- 14. Table V gives the results of examinations for malaria of blood films which were made from prisoners admitted to Victoria Gaol. The results are arranged in districts according to addresses supplied. The parasites are not classified as in the great majority of positive findings, the diagnosis could only be made from thick films and could not be established from thin films owing to the scantiness of the infection. The films were obtained through the co-operation of the M.O. Gaol and his staff, and were stained and examined in the Laboratory of the Bureau.
- 15. Records obtained from the R.A.M.C. authorities regarding incidence of malarial infection amongst the troops, British and Indian, are as follows (relapses not being taken into account): British Troops:—number of cases of malaria contracted during the year was 67, of which 3 occurred in the first quarter, 7 in the second, 10 in the third, and 47 in the fourth. In the first quarter 3 of the cases were amongst troops who had been in Camp, in the fourth quarter 8. Calculated on an average strength of 3778, the yearly admission rate for fresh cases was 17.73 per thousand.

16. Amongst the Indian troops there were 44 fresh cases, of which there were 8 in the first quarter, 3 in the second, 5 in the third, 28 in the 4th. In the first quarter, 1 of the cases was amongst troops who had been in camp, in the second quarter 2, in the fourth 20. The admissions work out for the year as 29.97 per thousand on an average strength of 1468.

Dengue.

17. According to returns received four cases of Dengue were admitted to Government Hospitals during the year.

Filaria.

18. Seven cases of disease due to filarial infection were reported from Government Hospitals during the year.

II.—GENERAL MOSQUITO SURVEY OF THE COLONY.

Anophelines.

- 19. The number and species of the various Anopheline larvae examined are given in Table VI. Table VII gives the number and species of the imagines obtained from pupae collected, and from pupae obtained from the larger larvae.
- 20. A. maculatus. Larvae were collected from the usual breeding places—streams, seepages, ditches. Adults were obtained by night catching done in the Dairy Farm cow byres, and in pigsties at Little Hong Kong, also by day catching done in dark ill-ventilated village byres and pigsties, and in the screened lines at Shing Mun Camp. Under ordinary circumstances this Anopheline is difficult to obtain from human dwellings.
- 21. Malarial infections in midguts and salivary glands were met with in the mosquitoes dissected, also larval filariae. This species was experimentally infected with subtertian malaria and with micro-filariae (W. bancrofti) at the Bureau.
- 22. A. minimus. Larvae were mostly met with in hill streams and irrigation ditches. As in previous years the hill streams appear to fall into three categories:—
 - (a) Those in which the larvae can be collected throughout the year except during or shortly after heavy rainfall.
 - (b) Those in which no larvae of A. minimus can be found during the period May to September inclusive, but were encountered in small numbers at other times.

- (c) Those in which A. minimus larvae are absent during the May to September period, but in collections made at the beginning and end of the year were almost as numerous as those of A. maculatus. A few specimens identified as A. fluviatilis have been obtained from larvae and pupae collected from this type of stream.
- 23. Few A. minimus larvae were collected from those portions of streams in which the grade was steep.
- 24. In morning catches adults were captured without difficulty in certain types of human habitation, especially buildings made of thatch and bamboo. As in former years these Anophelines were found to be important carriers of malaria and to harbour larval filariae.
- 25. This species was also experimentally infected with subtertian malaria, and micro-filariae (W. bancrofti).
- 26. A. hyrcanus var. sinensis. The larvae were met with in stagnant water with vegetation, e.g. wet cultivation, especially rice at certain times of the year, in pools amongst rice stubble, abandoned rice fields, sluggish streams and ditches. On a few occasions they were collected from small muddy pools without vegetation.
- 27. Like A. maculatus the imagines did not figure to any extent in morning collections from human habitations except in the case of the screened lines at Shing Mun. Considerable numbers were obtained from cowsheds at Shek O in morning catches prior to drainage measures being undertaken there, and from suitable village cowbyres and pigsties. A fair number were obtained from pigsties at Little Hong Kong in catches done at night.
- 28. Attempts to infect this species with subtertian parasites were not successful, but it was infected with microfilariae (W. bancrofti).
- 29. A. jeyporiensis var. candidiensis. Larvae were collected from abandoned rice fields throughout the year. In the last quarter they were found in rice cultivation and in pools amongst rice stubble. Those found in the rice stubble were probably there before the rice was cut, as few were found in surveys done some weeks afterwards.
- 30. Like A. minimus the imagines were obtained without difficulty in morning catches done in thatched huts or matsheds within flying distance of the breeding places. They were found to be important carriers of malaria and to harbour larval filariae as in former years. They were experimentally infected with subtertian malaria.

- 31. A. aitkeni var. bengalensis. The larvae were met with in shady pools in hill streams but no adults were obtained in catches. This mosquito has plain wings like a Culicine, specimens hatched out from larvae have been observed to adopt the Culicine attitude whilst resting.
- 32. A. tesselatus. No larvae of this species were collected during the year but a few imagines were obtained from huts at Little Hong Kong, and many more in catches done there at night in pigsties. One of the mosquitoes obtained from the huts was found infected with oocysts.
- 33. A. vagus. Larvae were collected from small grassy muddy pools and from pools in rice stubble in the course of surveys done on the mainland. Adults were captured in the catches done at the Dairy Farm cowbyres, Pokfulam, and in cowbyres on the mainland.
- 34. A number of larvae of A. karwari and A. splendidus were collected from fallow rice fields in the rainy season. It has been found that the lateral hairs on the 5th and 6th segments are of great help in distinguishing the larvae of A. karwari from those of A. splendidus and of A. maculatus. Few adults of either species were captured.
- 35. Specimens of larvae and imagines were received from Dr. L. C. Feng, Peiping Union Medical College, specimens of larvae from Mr. F. E. Baisas, Bureau of Health, Manila, of imagines from Dr. I. M. Puri, Malaria Survey of India, Kassauli. Specimens of imagines were sent to Dr. Feng, of imagines, larvae and eggs to Mr. Baisas, of imagines to Dr. G. A. Rose, Hangchow, of imagines to Professor Davis, Hong Kong University, of imagines to Dr. Scharff, Singapore.
- 36. Blood from the midguts of mosquitoes captured in various places were sent to M. Toumanoff, Chef du Laboratoire d'Entomologie de l'Institut Pasteur de Saigon for favour of examination. A full report has not yet been received but such information as is available is furnished in Table VIII.

Culicines.

- 37. Larvae of *C. gelidus* were met with and identified, this mosquito has not previously been recorded for Hong Kong.
- 38. Two new species of Ficalbia were submitted to Dr. Edwards, British Museum, one he considers to be a new species, the other to be closely related to F. chamberlaini.

- (Barr.) were collected from various tree holes at various times, and adults hatched out. On several occasions whilst making the collections adults were captured, amongst them being A. (S) w alba, but so far the larvae of this species have not been obtained, and attempts to get them, from captives did not succeed, even though these mosquitoes could be induced to take blood in the Laboratory, they invariably died without laying eggs. T. vicina was observed to feed upon man when encountered in the jungle although a slow beginner. In the Laboratory a larva of T. vicina was observed feeding upon a larva of A. (S) albopictus.
- 40. Laboratory bred specimens of Aedes togoi, a seashore pest, were found to breed in captivity without a blood meal, being only fed upon raisins; another generation was obtained from these. This mosquito has been experimentally infected during the year with micro-filariae (W. bancrofti).
- 41. A mosquito which closely resembles C. vishnui but whose larvae differ in some respects from those of C. vishnui, is being investigated.
- received from Dr. Scharff, this mosquito is rarely met with in the Colony, but one was captured by an Inspector on a mosquito net in a hut behind the village of Aberdeen. The captive laid eggs from which larvae and adults were obtained.
- formicaries, jugs, basins, etc. inside houses; in discarded bottles, tins, jars, etc. in the compounds of houses and under such circumstances cause a considerable nuisance. They also breed in tree holes. Near the quarters occupied by the Malariologist, breeding was taking place in tree holes in secondary jungle some 50 yards from the house. During the not weather this mosquito could be eaught in abundance in the jungle yet so few ever came into the house that it was not thought worth while to take any action especially as these tree holes were being kept under observation to ascertain what other species not forgetting Anophelines, might be found in them.
 - 44. C. fatigans, 1042 in number, were dissected for Avian malaria and for filarial infections. These mosquitoes were obtained from village huts and contractor's matsheds whilst searching for Anopheline mosquitoes. No infections were found.
 - 45. Specimens of larvae and adults of various mosquitoes were given to Dr. S. Hu (Lester Institute, Shanghai) on the occasion of his visit to the Laboratory, also living larvae of C. fatigans which he required for experimental purposes.

III.—THE CATCHING AND DISSECTION OF MOSQUITOES.

46. In the dissections done throughout the year the following Anophelines were found infected—A. minimus, A. jeyporiensis, A. maculatus, A. hyrcanus, and A. tesselatus.

47. The infected A. hyrcanus and A. maculatus were obtained from the Shing Mun catches, the A. tesselatus from the Little Hong Kong catches.

Night catching in cattle sheds.

- 48. Hitherto A. maculatus adults have only been obtained in insignificant numbers in day or night catches done under ordinary circumstances in human habitations although large numbers of their larvae could be readily obtained in the neighbourhood.
- 49. It was decided to try catching in the Dairy Farm cattle byres but as they are well lighted and well ventilated buildings, there was little possibility of obtaining Anophelines in morning catches, therefore catching was tried for one and a half hours from dusk onwards.
- 50. A beginning was made at the end of April. The General Manager of the Dairy Farm when approached on the matter, gave all possible assistance. A cattle attendant who was provided with a catching bottle and electric torch, worked at first under the supervision of one of the Staff of the Bureau. Catches were done in the byres along Sassoon Road, and above Victoria Road north of Sassoon Road.
- 51. A. maculatus were caught feeding on the cattle, or resting on the walls of the byres, usually gorged with blood. On windy or rainy nights, few or none were captured, but on still nights catches of 50 were not unknown, sometimes the collection exceeded 100. During 164 nights, 2819 A. maculatus, 19 A. hyrcanus, 31 A. vagus, 6 A. minimus, 1 A. jeyporiensis were captured. Of the 6 A. minimus, 5 were caught in December.
- 52. The mosquitoes were brought to the Laboratory, blood taken from the midguts and sent to M. Toumanoff, Chef du Laboratoire d'Entomologie de l'Institut Pasteur de Saigon, who kindly had the samples examined for precipitin reactions. A report has been received that positive reactions for cattle blood have been obtained from 234 midguts of A. maculatus. A further report regarding the remainder is being awaited.
- 53. The salivary glands of 712 A. maculatus whose midguts had been used for precipitin tests, were examined for sporozites, but none were found. No infections were found in the salivary glands or midguts of another batch of 597 A. maculatus.

- 54. These dissections were done during the malarious season of the year, and the results indicate that little or no malaria was being carried by A. maculatus, although it has been shown at the Bureau to be a good experimental carrier.
- 55. Unfortunately there are no closed pigsties in the immediate neighbourhood. There are pig yards with open air shelters, but it was not thought likely that Anophelines could be readily obtained from them.

Wong Chok Hang Village (Little Hong Kong).

- 56. Catching operations were continued throughout the year. The locality is surrounded by hills on all sides except in the direction of the sea. A stream with several branches flows through it. A ravine which was formerly a rice swamp, drains into the main stream. At the end of 1933 most of this swamp was ditched and divided into rectangular plots for growing crops such as Indian corn, three or four small plots were left for rice growing; rice was also planted in such of the ditches as held water. During the present year no rice was grown. In surveys done towards the end of the year, A. jeyporiensis larvae were found in good numbers in some of the ditches between the plots. The people of the village live in houses built of stone and roofed with tiles, the market gardeners in huts made of bamboo and roofed with thatch. All are engaged in growing crops and rearing pigs. The pigsties here are, as a rule, unsuitable as day time resting places for Anophelines owing to their exposure to wind and weather. No cattle are kept in the locality.
- 57. In 1931 a high spleen rate was found amongst the children and in 1932 a microfilaria rate of 12% was obtained from the examination of 106 people, the blood being taken at night.
- 58. From 8.30 a.m. until 11.30 a.m. collections were made by the catching coolie in two groups of huts on alternate days. These groups were situated north and south of Island Road, the northern group along the stream banks, close to places where A minimus larvae were in abundance, the southern group about 440 yards down stream where the larvae of A. minimus were scarce.
- 59. Of A. minimus, 2872 were obtained in 153 morning catches done in the northern group or 18.77 per morning, 829 were collected in 151 mornings from the southern group or 5.49 per morning about $\frac{1}{3}$ of the catch obtained from the northern group. It would thus appear that habitations closest

to the breeding places receive most attention from this Anopheline. Table 1X gives the results of morning catches. As in former years the majority of the A. jeyporiensis were obtained in the last quarter of the year.

- 60. Table X gives the results of dissections for malarial infections of mosquitoes caught in human habitations. For the first time, adults of A. tesselatus have figured in catches done in the Colony. A midgut infection was found in one of the two dissected in July. Three oocysts were seen in this specimen, measuring 41μ 34μ 29μ respectively. The pigment was light brown in colour, fine, arranged in lines and clumps. The only previous record of a malarial infection in this mosquito is from the Dutch East Indies, 1 in 1553 dissections.
- 61. In this locality A. minimus adults can be obtained throughout the year without difficulty but comparatively few A. maculatus and A. hyrcanus are ever got in day or night catches from human habitations in spite of the fact that their larvae can be collected in abundance in the neighbourhood.
- 62. Trials have been made by other methods. A portable hut was erected at the end of June, the catching coolie slept in it protected by a mosquito net. Mosquitoes could only enter the hut by narrow slots in the gauze of the mosquito proof windows. Before daylight the exits from the slots were closed and a collection made. Few Anophelines were captured by this device although in a similar contrivance in use at Shanghai, catches of 300 A. hyrcanus could be got in one night. It is hoped to obtain better results in the coming year by leaving the door open, or partly open during the night and closing it before dawn.
- 63. Owing to the good results obtained at the Dairy Farm Pokfulam by catching in the cattle byres from dusk onwards, similar methods were employed in two pigsties, one at the head of the main valley near the village of Little Hong Kong, the other at the head of the former Rice Ravine. The catchers remained in the pigsties for an hour and a half and by means of a torch light and catching apparatus, caught such mosquitoes as could be seen resting on the walls or roof. Catching was done every night except Saturdays, Sundays, and holidays from August onwards. Out of 524 Anophelines thus obtained, there were 202 A. maculatus, 243 A. hyrcanus, 35 A. minimus, 36 A. tesselatus, 8 A. jeyporiensis. No infections were found in 186 A. maculatus, 231 A. hyrcanus, 36 A. tesselatus, 32 A. minimus, 8 A. jeyporiensis dissected, although these were captured in a most malarious time of the year. Large numbers of Mansonia uniformis, Culex tritaeniorhynchus, Armigeres obturbans were caught.

The Shing Mun Area.

- 64. Catching was done daily by three coolies who searched each line from end to end. The results of the catches were brought to the Bureau for identification and dissection. From time to time checking was done by the staff of the Bureau. The catches are indicated in Table XI.
- 65. Of the important carriers A. minimus and A. jey-poriensis, 1,273 and 2,774 were taken in 347 morning catches as compared with 4,644 and 25,317 in 239 catches done in 1933 when there was a much smaller labour force.
- 66. The records for dissection for malaria are given in table XII. The infection rates of A. minimus, A. jeyporiensis, A. maculatus, A. hyrcanus were respectively 3.28%, 2.34%, 0.85%, 0.40%.
- 67. Several morning catches were made in the village of Wo Li Hop lying half a mile to the north of Shing Mun Camp and 386 anophelines captured. The great majority were obtained in cow byres and pig sties. Of the 94 A. minimus, 79 A. jeyporiensis, 169 A. maculatus and 45 A. hyrcanus caught, 78 minimus, 50 jeyporiensis, 157 maculatus and 34 hyrcanus were obtained from the animal houses. No infections were found in 86 A. minimus, 85 A. maculatus, 39 A. hyrcanus dissected but 3 (4.35%) infections were found in 69 A. jeyporiensis.
- 68. Catching was done at Needle Hill matsheds where some 150 coolies were housed. These matsheds were situated on the left bank of the Shing Mun opposite the dam. In 269 morning catches only 398 anophelines were obtained. Of the 92 A. minimus dissected 3 or 3.26% were infected, of 80 A. jeyporiensis 1 or 1.25% were infected. No infections were found in 44 A. maculatus, 165 A. hyrcanus and 1 A. splendidus.
- 69. Catches were made in the village of Sheung Kwai Chung which lies at the head of valley A.4 half a mile to the west of Shing Mun Camp. Labourers employed at the camp reside in this village. Twelve morning catches were done and 432 anophelines captured. Out of 250 A. minimus, 92 A. jeyporiensis, 48 A. maculatus, 42 A. hyrcanus taken, 196 A. minimus, 84 A. jeyporiensis, 47 A. maculatus and 41 A. hyrcanus were captured in animal shelters. In 100 A. minimus dissected 2 were found infected and both had been caught in animal houses.

Chai Wan.

70. This is a village situated beside Chai Wan Bay. Pigs are kept by the villagers but no cattle. A catch was done one morning in September in the pigsties, 93 A. minimus were

obtained, 65 were dissected, 2 (3.07%) were found infected. In view of the proximity of this village to Lyemun Barracks this information was forwarded to the R.A.M.C. authorities.

Dissection of Mosquitoes for Filaria.

71. Mosquitoes obtained from Shing Mun Camp, Wo Li Hop, and Little Hong Kong, were examined for larval filariae. The results are shown in Table XIII. Three instances of double infection (malaria and filaria) were encountered, in an A. minimus from Shing Mun, in an A. minimus from Little Hong Kong, and in an A. jeyporiensis from Little Hong Kong.

IV.—THE RESULTS OF FEEDING EXPERIMENTS. Malaria.

- 72. From 25th November until 3rd December several batches of Anophelines were fed upon a patient in the Victoria Gaol Hospital, whose blood was found to contain numerous crescents and these only. The patient did not suffer from malaria symptoms during the period in question. As in the case of the filaria feeding experiments, every assistance was rendered by the Gaol authorities, the Hospital Supervisor giving the matter his personal attention.
- 73. The mosquitoes were obtained from larvae and pupae collected, all (except one A. hyrcanus and one A. jeyporiensis which fed twice) took only one blood meal although they were offered them on other occasions. Dissections were done on the fed mosquitoes from 7th December until 11th January 1936.
- 74. As many as 170 oocysts were counted in the midgut of one A. maculatus, in several of this species over 100 oocysts were counted. No salivary gland infections were met with although two of the A. maculatus were not dissected until 40 days after feeding; in these the oocysts measured about 50μ in diameter.

75. The results obtained were as follows:—

Species.	No. which fed.	No. infected.	Per- centage infected.	Average No. of oocysts per infected mosquito.
A. maculatus A. minimus A. jeyporiensis A. hyrcanus var. sinensis	22 11 2 9	14 5 2	63.63 45.48 100.00	67.71 48.40 2.5

76. It is hoped to carry out further experiments including those on patients harbouring benign tertian and quartan gametocytes.

Filaria.

- 77. It has hitherto been considered that the larval filariae found in the dissections of Anophelines and C. fatigans were derived from human sources, in order to confirm this, feeding experiments were done with various mosquitoes which were fed upon patients in the Victoria Gao! Hospital, whose blood contained W. bancrofti. Arrangements were made accordingly, with the co-operation of the Superintendent of Prisons and the Medical Officer Gaol. The Hospital Supervisor rendered valuable assistance.
- 78. On the 18th, 19th, and 20th September batches of C. fatigans, and A. hyrcanus var. sinensis were fed with the following results:—

Species.	No. which fed.	No. dis- sected.	No. in- fected.	Per- centage infected.	Average No. filaria per infected mosquito.
C. fatigans	14	14	11	78.57	5.22
A. hyrcanus var. sinensis	18	18	6	33.33	7.14

- 79. Of the A. hyrcanus the maximum number of filariae found in one mosquito was 43, of the C. fatigans 38. Proboscis infections were met with in both.
- 80. Batches of A. minimus, A. maculatus, A. (S) albopictus, A. (F) togoi were fed upon another patient during the period 9th October-24th October, with the following results:—

Species.	No. which fed.	No. dis- sected.	No. in- fected.	Per- centage infected.	Average No. filaria per infected mosquito.
A. minimus A. maculatus A. (F) togoi A. (S) albopictus.		10 11 64 8	4 4 32 —	40.00 36.36 50.00	1.50 6.75 4.87

- 81. The maximum number of filariae found in any of the A. minimus was 2, in any of the A. maculatus 18, and in any of the A. (F) togoi 14.
- 82. Proboscis infections were met with in A. maculatus, A. (F) togoi; in the case of A. minimus fully developed forms were found in the head. In these experiments the mosquitoes had only one opportunity of feeding.
- 83. Table XIV gives findings obtained from examinations for micro-filariae of thick films made from prisoners admitted to Victoria Gaol. These films were taken in the daytime for examination for malarial parasites.

V.—Investigations as to the Prevalence of Malaria in Certain Areas.

Queen Mary Hospital neighbourhood.

- 84. Mosquito catches were made in the matsheds on the site which housed about 400 coolies employed on levelling and building. From January until July monthly visits were made, after June weekly visits, as incidence of malaria is usually higher from that time onwards. The Inspector engaged in catching did not find it necessary to take any blood films nor did he obtain any Anophelines.
- 85. Several surveys have been done in previous years within a circle of half mile radius from the site, as indicated by the circle on the attached map. Larvae of A. maculatus have always been found in abundance but few larvae of A. minimus except when the surveys were done in the colder months when they were sometimes met with in comparatively large numbers in a small sector of the half mile circle in the neighbourhood of Mount Davis Road. In this sector in which there were neither cattle nor pigs, 19 out of 26 children (73%) examined in 1931, had enlarged spleens.
- 86. In the remaining sector of the half mile circle, 124 children were examined 3 (2.4%) had enlarged spleens, this sector contained numerous cattle and pigs, the property of the Dairy Farm Company.
- 87. Monthly larval surveys were continued in two streams (A) and (B) north and south of Mount Davis Road, as far as possible all larvae present were collected in (A) between Conduit Road and Forestry Path, in (B) between Island and Victoria Roads. Similar results were obtained to those of previous years, in neither streams were A. minimus found during the period May-September inclusive, during the rest of the year they were either absent, or present in insignificant numbers in (A), but

- in (B) in some collections made in the cold weather, A. minimus larvae were numerous. A few adults of A. fluviatilis were obtained from the larvae and pupae collected from (B).
- 88. Monthly collections were also made from two streams (D) and (E) in the portions lying between Island and Victoria Roads. Stream (D) runs alongside Sassoon Road, stream (E) runs parallel to (D) but is further south.
- 89. In January 322 A. maculatus, 89 A. minimus larvae were collected from (D), the first occasion in the course of several surveys in which such a large number of A. minimus were obtained from this stream. In recent years a considerable amount of filling has been done in the angle between Island Road and Sassoon Road, the face of the filling is supported by a stone wall containing numerous weep holes, from one of these, water which feeds the stream issues. Later in the year a dam was placed across the stream and the pool thus formed used for bathing in the hot weather, and for washing in the cold season.
- 90. There are cattle byres on the banks, the drainage from which finds its way into a concrete sump which overflows into a system of ditches but does not directly pollute the stream. Only 10 more A. minimus were collected during the rest of the year, in the last quarter. Altogether 1,204 A. maculatus and 99 A. minimus were found in this portion of D.
- 91. There is a dam across stream (E) a little below Victoria Road, farther down a manure dump drains directly into the stream. There are also cattle byres along the bank as in the case of stream (D). A total of 1,877 A. maculatus and 7 A. minimus larvae were obtained. No A. minimus were found in the May-September period.
- 92. Chemical analysis of the water and the determination of its ph value, may perhaps help to explain why A. minimus larvae is present in some streams and absent from others. The effect of soap pollution upon streams requires investigation in regard to the presence or absence of A. minimus.

Felix Villas (Pokfulam).

93. Investigations were made in this neighbourhood owing to complaint of the occurrence of a case of malaria in November. Thick blood films were obtained from 62 servants. Out of 21 who resided on Mount Davis Road, 1 was found positive; out of 41 who resided at Felix Villas 1 was positive. No parasites could be obtained subsequently in the examination of a thin film obtained from the latter, benign tertian parasites were found.

94. The nearest stream to Felix Villas was searched on the 16th December, 38 larvae of A. maculatus were found. The stream is about 300 yards distant, there are several residences nearer to it from which no complaints have been received.

Aberdeen Industrial School.

- 95. Complaints regarding an outbreak of malaria were investigated. Two of the teaching brotherhood, one of whom is said to have died of cerebral malaria, were admitted to hospital in June, also three boys. According to information received the diagnosis was not made by blood examination. In the case of another boy who was admitted to hospital in July, parasites were reported. On the 23rd and 24th July 51 thick films were taken, 47 from the boys, 4 from school servants. All concerned had resided in the School since March, no parasites were found.
- 96. On the 13th August a visit was paid to the P.W.D. coolie lines on the right bank of the stream on which the School is situated, the coolie line is close to the School and the coolies look after filter beds. The Overseer who has lived in the neighbourhood for years, stated that neither he nor the four coolies ever suffered from malaria, nor did the wife of one of these, nor her small son aged 3. Thick films were taken from the overseer, from two of the coolies, the woman, and the little boy. No parasites were found. The child had no enlargement of the spleen and had lived there all his life.
- 97. No complaints have hitherto been received of malaria at Aberdeen, nor do the statistics received from the Police Station, indicate any great incidence of the disease.
- 98. Monthly catches have been done throughout the year in the squatter area on the hill side immediately behind or north of the village, Culicine mosquitoes only were caught. In this area, which is in the next valley to the valley in which the school is situated, there are hundreds of pigs kept, it has been found that A: maculatus can be taken readily in pigsties by night catching.
- observation since 1934 and several larval surveys done. Larvae of A. maculatus could be collected throughout the year but it appears to be the type of stream which harbours A. minimus only in the cooler season, the cases in question occurred during the hot weather.
- 100. In the opinion of the Malariologist this stream has not yet been proved to cause malaria.

Deep Water Bay.

101. A number of larval surveys were made in the main stream which flows past the Golf Club House, at times 20%-

25% of the larvae obtained were A. minimus, in one collection made in October 70% were A. minimus.

102. In a survey made in one of the branches of this stream, over 300 A. aitkeni larvae were collected. It is unusual to obtain this larvae in such numbers in the course of a survey in one area.

Repulse Bay.

- 103. Several surveys were done in the stream which runs beneath Island Road and Beach Road east of the Lido, between R.B.L. 168 and R.B.L. 182. Larvae of A. maculatus and A. minimus could usually be found; on one occasion 223 larvae of A. minimus were collected from it.
- 104. Middle Beach (Repulse Bay). Whilst the road was under construction in 1934, malaria was found to occur amongst the labourers engaged in making it. A stream adjacent to the labourers' matsheds, harboured large numbers of A. minimus larvae at times, and infected A. minimus were found in the matsheds. After the labourers had left, several surveys were done in the stream and A. minimus larvae were found in abundance. A number of bathing matsheds were erected in the vicinity. In the autumn seven people who took part in a moonlight picnic are said to have contracted malaria there; this stream will be a source of danger until it is properly dealt with.

Village of Wong Ma Kok, Stanley Peninsula.

July. Larval surveys were done in the adjacent wet cultivation, fallow rice fields, and stream, only a few larvae of A. hyrcanus and A. maculatus were obtained. No Anophelines were captured in this village. Two out of seven children examined had enlarged spleens, one of these had come from Tai Po recently, the other had resided in the village for four years.

Tytam Tuk Pumping Station. Investigation and Prevention.

- by the Water Authority, P.W.D., in October. Thick blood films were taken from 30 residents, 18 contained malarial parasites. A larval survey was done within a circle of half mile radius from the station, streams were found to harbour the larvae of A. maculatus and A. minimus.
- 107. Arrangements were made with the P.W.D. for the clearing and oiling of breeding places. This work was done under the direct supervision of the Assistant to Malariologist who, as a Sanitary Inspector, has had extensive experience of such work in Malaya. The labour force and materials were supplied by the P.W.D.

Hong Kong Jockey Club Stables.

- 108. Investigations were made as to the occurrence of malaria. Larval surveys were carried out during the early part of the year and practically only larvae of A. maculatus were found. The same results were obtained in surveys done at a later period. Morning catches were done monthly in the thatched huts below the Stables. These were inhabited by market gardeners, and were close to the streams in which A. maculatus had been found. No adult Anophelines were found in the hut but Culicines were.
- 109. On the 14th and 15th October, thick blood films were obtained from 100 riding boys who resided on the premises. Of these, 99 had lived there throughout the year, 1 for 2 months previously. Parasites were found in only 2 of these films, one of which belonged to the individual who had been in residence 2 months. None of these people use mosquito nets.
- 110. One of the Stable men was supplied with a catching bottle in order to ascertain if mosquitoes could be caught on the horses at night, but none were obtained. Perhaps better results could be got if the catching were superintended for a time by one of the Bureau Staff as was done at the Dairy Farm or perhaps the A. maculatus prefer the pigs of the market gardeners.

Patheung Valley.

- 111. This valley is situated near Au Tau Police Station, 27th mile Castle Peak Road, and is surrounded on all sides by high hills except on the west towards the sea; it is flat, and, cultivated up to the foot of the hills, the cultivation being mainly rice. Most of the villages are situated close to the hills, but some are over 1,000 yards distant.
- 112. During the rainy season larval surveys were done in those portions of the streams and irrigation ditches which were remote from the hills, few larvae of A. hyrcanus were found and still fewer larvae of A. minimus, although the respective adults could be obtained without difficulty in catches done in the adjacent villages. At the end of the year larvae of A. hyrcanus and A. minimus were collected from portions of the streams and irrigation ditches remote from the hills, but considering the time spent and the ground covered, the numbers were not large; many more A. minimus were obtained from those portions of the streams which were nearer the hills.
- 113. Judging by spleen rates done in the schools, by the Anophelines caught in the villages and by the results of the examination of blood films taken from sick persons, evidence of malaria was obtained from every village even in those farthest from the hills. The results of spleen examinations are given in Table XV.

VI.—Action Taken for the Abatement of Local Mosquito Nuisances.

Mount Kellet and the Peak.

- 114. Action was taken to ascertain the cause of the plague of mosquitoes which every spring for years past caused so much annoyance to the occupants of those dwellings situated within half a mile of Mount Kellet.
- 115. On the western side of the Mount Kellet ridge is a stream which flows into Mount Kellet Bay, the lower portion of which stream is polluted by drainage from cattle byres, C. fatigans larvae were found in enormous numbers in the polluted pools, but none were found above the pollution. The polluted portion was trained by removing stones and small boulders, and afterwards oiled.
- 116. On the eastern side of Mount Kellet ridge is a stream which flows into Aberdeen Bay which is also polluted by drainage from pigsties, cess pits etc. larvae of *C. fatigans* were found in the pools. After the first mentioned stream had been dealt with, *C. fatigans* could still be caught on the Mount Kellet area in small numbers, when the second stream was dealt with, the nuisance ceased.
- 117. The anti-mosquito measures were carried out by coolies of the Sanitary Department working under the direction of the Assistant to the Malariologist.

Pokfulam.

- 118. At the Dairy Farm, Pokfulam, a cess pit discharges into the stream which receives the overflow from Pokfulam Reservoir and the drainage from Pokfulam Village, C. fatigans bred plentifully in the polluted pools. Between Victoria Road and Waterfall Bay, water-cress was grown in the bed of this stream, and irrigation ditches led from the stream into various wet cultivations. C. fatigans larvae were found in numbers in the water cress beds and in the wet cultivation.
- 119. The Assistant to Malariologist persuaded the market gardeners to cease cultivation of water-cress in the stream, so that it could be cleared and oiled, and also arranged with them to dry out the wet cultivations for a few hours one day a week. Practical demonstrations were given to these people of the development of mosquitoes, from larvae and pupae collected and kept in bottles.

120. Several deep pools in the rocks were filled up with stones and soil, grass was induced to grow on them, other shallow pools were filled up with cement by the Dairy Farm Staff. Very little damage was done to this work by the rains. Breeding places in Pokfulam village which were causing a mosquito nuisance were also dealt with. A great improvement resulted.

Shek O.

- 121. Complaints having been received from the European residents of the seaside resort of Shek O of a plague of mosquitoes investigations were carried out in the neighbourhood. The mosquitoes causing the nuisance were C. fatigans, A (F) togoi, C. sitiens and A (S) albo pictus.
- 122. C. fatigans was found breeding in septic tanks, and in the sumps connected with houses and pigsties in the native village. A. albopictus larvae were found in abundance in water collected in tins and bottles near the bungalows. C. sitiens bred in collections of water in old boats. A. togoi larvae swarmed in rock pools close to the sea shore and on an island close by.
- 123. Anti malarial and anti mosquito work were commenced on 16th July by the Assistant to Malariologist. Two coolies, oiling mixture and tools were supplied by the Sanitary Department, two coolies and two sprayers by the Shek O Club.
- 124. The septic tanks were oiled, and the sumps emptied weekly by the villagers. A. (F) togoi bred in rock pools by the sea, some of these were filled up with stones and soil, others oiled. A. (S) albopictus larvae were found in abundance in a miscellaneous collection of tins and bottles in the bungalow compounds, these were dealt with; also old disused boats on the beach which had filled with water, and were breeding C. sitiens.
- 125. No difficulty was experienced in securing the necessary help and co-operation from the villagers. As at Waterfall Bay, practical demonstrations of the development of mosquitoes from larvae and pupae were given.
- 126. The swampy ravines around the Shek O Club were ditched and drained, unnecessary ditches were filled in, streams were cleared for oiling. It was decided to leave the steep portions of the streams alone, as hitherto A. minimus larvae have not been met with in numbers in such places.
- 127. Unfortunately the main drainage is obstructed by a sand bar near New Shek O Village. The building of a groyne, or drainage by a culvert with tidal flap, appears to be the

- remedy. On account of one of the streams being used as a water supply by the villagers of New Shek O, oiling could only be done in part of it, in the unoiled portion weekly larval collections were made.
- 128. The results were so good that some of the European residents began to dispense with mosquito nets. It was thought wise to issue a warning that though the mosquito nuisance had been abated anti-malaria measures had only been started.
- 129. On August 8th four sick people were found in old Shek O Village, blood films were taken, all contained malarial parasites. At the end of the year the nucleus of a squatter population took up residence in an area formerly under rice cultivation which was situated on the left bank of the stream which flows into Big Wave Bay. Blood films were taken from 8 people on 13th December, 2 of these contained malarial parasites.

VII.—Anti-Malarial Measures at Shing Mun Dam (Jubilee Dam).

- 130. The investigative and preventive measures taken at the Shing Mun (Jubilee) Dam area during the year 1935 constituted a continuation of those commenced at the end of 1932 and continued through 1933 and 1934.
- 131. Reputed to be one of the most malarious districts in the Colony arrangements had been made between the Medical Department and the Engineer in charge for co-operation in the scheme for protecting the health of the labour force engaged in the construction of the dam. All drainage works of a permanent nature were constructed by the engineering staff. Malarial investigations and research, temporary ditching, oiling and paris green application were the concern of the malaria bureau. The care of the sick both inpatients and outpatients was in the hands of the Medical Officer, New Territories.
- 132. The resident medical staff consisted of one Chinese Medical Officer in charge of both preventive and curative measures, two dressers, two antimalaria inspectors and a gang of coolies.
- 133. The Camp situated 500 feet above the sea level and in the centre of an area which for more than a mile in all directions consists of hills and valleys in granite formation comprised a number of coolie lines mostly of permanent construction.

- 134. The engineers being unduly optimistic regarding the influence their prospective drainage system would have on the mosquito population at first refrained from carrying out the medical authorities recommendations for screening the lines. Later, the large catches of mosquitoes in the lines having proved the need for such protection, attempts were made to remedy the error but with only partial success.
- 135. Such screening had however one advantage for it converted the lines into traps where such mosquitoes as did find entrance had difficulty in escaping. The trapped insects were caught by the catcher in the morning. Specimens of species which normally leave the proximity of their host after partaking of his blood, and which would otherwise have escaped, remained behind on the screens to be added to the catchers bag for subsequent dissection. In this way faulty screening assisted the Malariologist in his investigations.
- 136. Researches carried out in the Malaria Bureau had proved A. jeyporiensis, which breeds in the wet terraced fields among the hills, to be a very potent carrier. What was not known in 1933 was its range of flight. This was afterwards proved to exceed half a mile, a matter of great importance to Shing Mun Camp which had, within flying distance, a large number of such fields some under rice cultivation, others abandoned and permanently flooded, the latter being even more dangerous than the former.
- 137. The population of the Camp varied between 1875 in January and 2835 in November. The average monthly labour force was 1974 as compared with 595 in 1933. Most of these were Cantonese but there was a considerable force of coolies from Shanghai and a few Tamils, natives of South India. In addition there were between twenty and thirty Europeans occupying properly screened bungalows a quarter of a mile distant.
- 138. As will be seen from the map the Camp lies close to the divide separating the waters running east to the Shing Mun from those running west and south to empty into Gin Drinker's Bay.
- 139. The Shing Mun River rises east of Tai Mo Shan, flows south to Pineapple Pass afterwards turning east to enter the gorge. It finally outlets into Tidal Cove near Shatin. Above the gorge the bed of the river is strewn with granite boulders and pebbles of various sizes, the stream itself consisting of pools connected by small rapids.

- 140. Flowing south from Tai Mo Shan is a large stream "A" with numerous branches which lie on all sides of the Camp. The streams are rocky bedded and boulder strewn, the boulders being of all sizes and shapes. In places the grade of the streams is steep, in other places flat. Sometimes the course leads through deep gorges. In some of the valleys rice fields arranged in terraces have been constructed by building a series of stone walls across the valleys in order to retain the soil, the stream which had flowed through the valley being usually diverted to one side and used as an irrigation channel. In other instances the water for irrigation is derived from seepages which drain into ditches.
- 141. Since 1933 anti-larval measures had been completed over the whole area within half a mile of the Camp. This protected area had been extended along valley A.5 up to the access road. Works of a permanent nature were carried out within the quarter mile radius. In the rocky bedded streams "C", "D", and "E" drainage pipes and rubble were placed. Engineering work was also done on that portion of the ravine which runs between Pineapple Pass and the village of Wo Li Hop and in the A. jeyporiensis breeding places lying along the Shing Mun and its tributaries between Pineapple Pass and the P.W.D. dam.
- 142. The remaining streams and rice fields within the half mile circle were dealt with by temporary measures by the Bureau's staff. Streams were cleared and water oiled. Rice fields fallow and flooded in which A. jeyporiensis were breeding in enormous numbers were dried by ditching and the ditches oiled.
- 143. The nearest human habitations to the Camp is the village of Wo Li Hop which is half a mile distant as the crow flies.
- 144. There are no human habitations in the upper reaches of the Shing Mun the villagers having migrated. The rice fields which formerly existed in most of the secondary valleys between Pineapple Pass and the abandoned village of Ho Pui became grass grown swamps where A. jeyporiensis bred in large numbers until drainage operations rendered them unsuitable for the purpose.
- 145. Since 1934 measures directed against A. jeyporiensis had been taken in the Shing Mun valley extending from Pineapple Pass to Po Hui village, and in the valleys of the upper tributaries of "A" lying to the north of the access road, and reaching westwards to the headwaters of stream "B".

- 146. During 1935 investigations and anti-mosquito measures continued unabated. The staff engaged in this work consisted of two anti-malarial inspectors and ten coolies the whole under the supervision of the Resident Medical Officer. From the 25th of September onwards owing to the number of cases of malaria an additional Chinese Medical Officer was appointed to look after the sick and thus allow the Resident Medical Officer to devote his whole attention to anti-malarial work.
- 147. The anti-malaria gang of 10 coolies oiled and kept clear the streams and did such ditching as was necessary.
- 148. Daily mosquito catching was done by three coolies of the labour force who searched each line from end to end with the aid of an electric torch. The resulting catch was brought to the Malaria Bureau for identification and dissection. From time to time checking catches were done by the Staff of the Bureau. The catches are indicated in Table XI.
- 149. Of the important malaria carriers A. minimus and A. jeyporiensis, 1,273 and 2,774 were taken in 347 morning catches as compared with 4,644 and 25,317 in 239 morning catches done in 1933, when there was a much smaller labour force.
- 150. The majority of the A. maculatus were obtained from June onwards. A. hyrcanus was poorly represented in the June, July, August catches, but its yearly total much exceeded that of any other species. Like A. maculatus, it usually leaves buildings after feeding. Some specimens of both were however trapped by the mosquito gauze.
- 151. The records for dissections for malaria are given in Table XIII. The infection rates of A. minimus, A. jeyporiensis, A. maculatus, A. hyrcanus were 3.28%, 2.34%, 0.85%, 0.40%, respectively. In 1934 they were 2.97%, 3.58%, 1.11%, 0.27%, and in 1933, 12.48%, 9.93%, 3.48%, 1.21%.
- 152. The results of dissections for filariae are given in Table XVI.
- 153. Amongst the Culicines captured, C. tritaeniorhynchus, C. sinensis, C. whitmorei figured largely.
- 154. The valley of the Shing Mun and its branches as far as the village of Ho Pui were kept under observation in order to ensure that the drainage of the fallow rice fields was functioning. Numerous surveys were done in the drainage ditches and streams. Only larvae of A. maculatus were encountered but not in great numbers. A. maculatus have

been obtained in catches done in the goat pens at Shing Mun Police Station, so it is not unlikely that they may feed upon deer in remote areas. From time to time searches were made in pineapple plants, a few larvae of H. genurostris and A. (S) albopictus were collected from them.

155. The area between the Shing Mun and stream A, north of the Access Road, was visited from time to time and the fallow rice fields inspected, some of which were situated along both banks of A. Several morning catches were done at Wo Li Hop. The great majority of the Anophelines captured were obtained from cowbyres and pigsties. Out of 99 A. minimus, 79 A. jeyporiensis, 169 A. maculatus, 45 A. hyrcanus caught, 78 A. minimus, 50 A. jeyporiensis, 157 A. maculatus, 34 A. hyrcanus were obtained from the animal houses. In 1933, 5,748 Anophelines were obtained in 40 morning searches or 143 per morning, in 1935, 392 in 39 mornings or 10 per morning. reduction is apparently due to the anti malarial operations undertaken for the protection of the Camp. No infections were found in 86 A. minimus, 85 A. maculatus, 39 A. hyrcanus, dissected, but 3 (4.35%) infections were found in 69 A. jeyporiensis. Coolies employed at the Camp reside in this village.

156. North of the Access Road between streams A and B, several rice fields were found which had been allowed to go flooded, and found to be breeding A. jeyporiensis. The Resident Medical Officer obtained the permission of the owners to drain them.

and on the left bank to the south of the road two matsheds were erected to accommodate labourers engaged in breaking stones. Though the fallow rice fields in this neighbourhood had been dealt with in 1934 there were many rice fields in the main valley of stream "B" which had not been touched and which were within easy mosquito flying distance. During May, 10 morning catches resulted in the capture of 468 anophelines or 46 per morning. In June, 810 were taken in 14 mornings or 58 per morning. The majority were A. minimus and A. jeyporiensis.

158. At the end of June the matsheds were demolished and the labourers, a number of whom were harbouring malaria parasites, took up work at the camp and helped to swell the malaria figures for July.

159. At the end of the year 100 military camped on the site mentioned above for four or five nights. Seven cases of malaria resulted.

- 160. Catches were also made in the village of Sheung Kwai Chung which lies at the head of A4 just outside the controlled area. Labourers employed at the Camp reside in this village. Twelve morning catches were done, 432 Anophelines captured. Out of 250 A. minimus, 92 A. jeyporiensis, 48 A. maculatus, 42 A. hyrcanus taken, 196 A. minimus, 84 A. jeyporiensis, 47 A. maculatus, 41 A. hyrcanus were captured from the animal shelters, 100 A. minimus were dissected, 2 infections were found, both these mosquitoes had been obtained in the animal houses.
- 161. Monthly surveys from November 1934 to August 1935 were done by the Staff of the Bureau in the fallow rice fields in the valley of A.la, part of which is now being used as a shooting school by the Skeet Company. Larvae of A. maculatus, A. minimus, A. karwari, A. splendidus were collected sometimes in fair numbers but small in comparison with those of A. hyrcanus and A. jeyporiensis. Out of a total of 17,533 larvae collected, 42% were A. jeyporiensis, 50% A. hyrcanus. Drainage of the rice fields was commenced by the Resident Medical Officer in the middle of August and completed by the end of that month. There was no difficulty in securing co-operation from the Skeet Company and other owners. On reference to the map it will be seen that all fallow rice fields considered to be of any importance, have now been drained.
- 162. By the end of the year Anti-malarial operations had been extended beyond the half mile circle up to the right bank of A.2 as far as the road, and from thence along both banks of A and A.4 to Sheung Kwai Chung, irrigation ditches were cleared of vegetation and the flow improved by better grading in order to make them unsuitable for A. minimus larvae; rice fields were drained as soon as the second crop had been cut, so as to destroy any larvae of A. jeyporiensis in them.
- 163. By these measures and those undertaken in the Skeet valley, extensive breeding grounds of A. minimus and A. jeyporiensis were done away with and satisfactory results obtained. In October 1933, the A. minimus catch was 530, the A. jeyporiensis 3,019,—for 27 mornings; in October 1935, the A. minimus catch was 149, and the A. jeyporiensis 685, for 30 mornings.
- 164. Investigations were carried out by the Staff of the Bureau in the rice cultivations along streams A.2e, A.2f; larval collections were made early in October, in the middle of October, and at the end of October. As in former years the percentage of A. jeyporiensis larvae rose considerably by the end of the month; in the case of A.2f it was 11% of 327 larvae

collected, in A.2e 25% of 317 larvae. In the early October collections, only 1 A. jeyporiensis larva was obtained. On reference to Table XII, it will be seen that the A. jeyporiensis catch rose considerably in October and November, and fell sharply in December. Of the 1,415 A. jeyporiensis caught in October and November, 1,054 were obtained during the period mid-October to mid-November. It would seem that the rise in the A. jeyporiensis catch in October and November is mainly due to breeding in the rice fields from October onwards.

- 165. Several surveys have been done in stream A.2 between the road and the Aqueduct. Most of the boulders have been taken out of this stream in order to make terraces for cultivation. Few larvae have ever been found in A.2.
- 166. Stream A is a difficult stream to deal with in the rainy season. There are several large boulders in its broad bed obstructing the flow of water, and consequently in the rains, innumerable pools are formed which make oiling, and checking of the oiling difficult. An inspection was made early in the year along with the Shing Mun Engineering Staff and the question of the removal of certain boulders raised. Towards the end of the year training suitable for the dry season was commenced but the obstructing boulders still remain.
- 167. Searches were made along the east bank of the Shing Mun from opposite Ho Pui southwards to the dam and along the aqueduct up to the swampy ravine at the head of stream A.2. No places likely to yield A. jeyporiensis larvae in large number were found. As in 1933 very few anopheline larvae were found in the swamp at the head of A.2.
- 168. Catching was done in Needle Hill matsheds situated on the left bank of the Shing Mun opposite the dam. The sheds gave accommodation to coolies engaged in quarrying. At the end of the year the number of labourers housed here amounted to 150. In 269 morning catches only 398 anophelines were obtained but of the 98 A. minimus dissected 3 or 3.26% were infected. Of 80 A. jeyporiensis 1 or 1.25% was infected. No infections were found in 44 A. maculatus, 165 A. hyrcanus and 1 A. splendidus.
- 169. In the course of larval surveys done by the Shing Mun Staff, larvae of A. jeyporiensis were found in the grassy ditches between plots of dry cultivation. In December a survey was done by them in the pools in rice stubble along and east of the Castle Peak Road between the points where stream A meets the Road and where the Access Road meets it. The rice fields are situated at the foot of a ridge and some of them had been drained dry. Of 362 larvae collected, 315 were

- A. hyrcanus, and only 11 A. jeyporiensis. So far, larvae of A. jeyporiensis have only been found in pools in rice stubble soon after reaping of the second crop.
 - 170. In order to reduce the A. jeyporiensis catch in October and November, drying off of the rice fields on one day of each week from the end of September, should give good results. This measure has been legally imposed in Java. Owing to the density of the growth of the rice at that time, it is difficult to understand how Paris Green could be usefully employed.
 - 171. The Malariologist paid 42 visits during the year, the Assistant to Malariologist 4; four Inspectors made 72, 74, 22, and 19 visits respectively. In addition two Vaccinators paid 35 and 8 visits and two Laboratory coolies 2 visits each.
 - 172. The visits were made for the purposes of larval surveying, searching for new breeding places, checking of oiling measures, inspecting fallow rice fields which had been drained to ensure that the drainage was being upkept, checking local Anopheline catches, inspecting areas dealt with by engineering works.
 - 173. The Anti Malarial and Hospital Staff were housed in mosquito proofed quarters, none of them contracted malaria.
 - 174. Twenty six Europeans resided in mosquito proofed quarters; no cases of malaria were reported.
 - 175. A Police force, eight in number, resided at Shing Mun in mosquito proofed quarters. No hospital admissions for malaria or other disease were recorded.
- 176. Table XVI gives the estimated population of the Labour Force, month by month, its distribution according to race, the number of cases treated due to malaria and to all causes, also the results of examinations of blood films for malaria. The figures have been supplied by the Resident Medical Officer.
 - 177. The malaria case rate was low in February, March, April, May, rose to 70.9 per 1,000 in July, declined somewhat during August, September, October, and rose to 102.1 in November. Some infections were contracted at the Camp, others at places outside the controlled area by a fluctuating labour force residing in malarious villages such as Wo Li Hop, Tsun Wan, Sheung Kwai Chung, but working at the Dam, a great number of cases must have been due to relapses owing to treatment in the lines of the majority as there was not sufficient accommodation in the hospital on account of the large increase in the labour force.

- 178. Very few mosquitoes were ever captured in numerous searches done in the screened building occupied by sixteen Tamil artificers. Only one of these suffered from malaria during the year: The line is not overcrowded, and the doors and windows can be kept shut at night during the hot weather without discomfort. There was overcrowding in the Chinese lines.
 - 179. Table XVII gives the monthly malaria case rates for the years 1933, 1934, and 1935, and the annual malaria case rates for 1933, 1934 and 1935.
 - 180. Owing to the filling up of the Reservoir at the end of the year, a boat was purchased by the Malariologist out of the Anti Malarial Field Works Vote, in order to enable the anti malarial Staff under his supervision to cross the Shing Mun at various points.

VIII.—Instruction of Inspectors and Teaching of Mosquitology.

- 181. The instruction of the Inspectors was continued throughout the year.
- 182. A high standard of efficiency and initiative has been maintained by them, both in Laboratory and in Field Work. They are proficient not only in the diagnosis of Anopheline larvae and mosquitoes, but in those of Culicines as well. Mosquitoes not previously recorded for the Colony and mosquitoes formerly recorded, but only recently encountered, have been brought to the notice of the Malariologist by them. The feeding experiments on patients infected with malaria and with micro-filariae were successful on account of the attention which they gave them. They observed and reported that A. (F) togoi could breed in a confined space in captivity without a blood meal.
- 183. Preparation of infected salivary glands mounted by them in Blés Fluid have kept well for several months and show the sporozoites clearly.
- 184. They have made a beginning of the study of Anopheline eggs.
- 185. By means of a projector and a camera shutter, microphotographs have been obtained by them of various objects, sporozoites, infected midguts, mental plates, and siphons. These were taken in a dark room, which has been constructed in the basement during the year.

- 186. Demonstrations in the collecting of mosquito larvae and of adults were given to classes of R.A.M.C. men, other classes received an advanced course. Two Chinese coolies employed by the R.A.M.C. were instructed in mosquito catching.
 - 187. Classes of instruction for probationer Sanitary Inspectors were continued from the previous year. Towards the end of the year classes were held for the students of the Hong Kong University.
 - 188. A Key to the Anopheline larvae of the Colony has been prepared.

IX.—Co-operation with other Departments and with Private Individuals.

- 189. From time to time, visits were paid to the P.W.D. drainage work progress at Sookunpoo Valley, Taikoo Dockyard, Lyemun Barracks, the former Military Sanatorium site Magazine Gap, and Kowloon Tong.
- 190. At Taikoo a considerable portion of a trained nullah was damaged during the rains by a cloud burst over the valley. A survey was done on 24th October and larvae of A. minimus were found in the damaged nullah. There were two hospital admissions for malaria from residences nearby. The damage has been repaired.
- 191. The training of the important portion of an A. minimus breeding stream, adjacent to Kent Road Kowloon Tong, which was commenced on September 1933, was completed by the end of 1934. In 1932, 23 cases of malaria were notified from this neighbourhood; in 1933, 17 cases; in 1934, 1 case; in 1935, 1 case.
- 192. Training of portions of two other streams which have been found to harbour A. minimus and which are close to Cornwall Street, Kowloon Tong, have been recommended.
 - 193. Four cases of malaria have been notified from that portion of Waterloo Road which lies between Rutland Quadrant and Prince Edward Road. Hitherto this area has been regarded as fairly free from malaria. Engineering works involving interference with drainage have been in progress there recently.
 - 194. Special visits were paid with the drainage Engineer to Kowloon Tong, Taikoo Dockyard and Lyemun.

- 195. Mosquito larvae and adults were identified for the Military Authorities. Anophelines captured at Military Camps and elsewhere and sent to the Laboratory were dissected and reports furnished.
- 196. Samples of fish, taken from pools in streams by Military collectors, were tested in the Laboratory and found to devour greedily both Anopheline and Culicine larvae. It was reported that no larvae could be obtained from the pools. The fish were of two species and were identified by Dr. H. A. Roxas, Manila, as Puntius semifasciclatus, Gunther, family Cyprinidae, and Rasborinus takakii, Oshima, family Cyprinidae. The former species was obtained by the Bureau Staff in the course of investigations made a few years ago.
- 197. A brief report on an undesirable camp site situated between Tsun Wan and Pineapple Pass was sent to the D.A.D.M.S. Hong Kong who took prompt action in the matter.
- 198. Capt. Burke, R.A.M.C., who is engaged upon detailed surveys and investigations of certain sites, worked at the Bureau from February onwards; the resources of the Laboratory and the knowledge and experience of the Staff were placed at his disposal. The results of his investigations have been of great value in checking and confirming those obtained by the Bureau Staff. Several interesting points have been brought by him to the notice of the Malariologist. He has met with larvae of A. jeyporiensis in certain type of wet cultivation (apart from rice) in greater numbers than have been hitherto encountered in local surveys. A member of the R.A.M.C. who had been trained at the Bureau, examined larvae there; the increased space available by the building up of a verandah has been of service in providing extra accommodation.
- 199. A visit was paid to Castle Peak and advice given to the owner of a site on which it was proposed to build.
- 200. A visit was paid to the R.A.F. mess at Kai Tak and arrangements made for the doing of a larval survey of the surroundings within half a mile radius.
- 201. Specimens of vegetables found in wet cultivation were sent to the Botanical and Forestry Department for identification and report.
- 202. A preliminary report was furnished to the Superintendent H. M. Naval Victualling Yard, Kowloon, concerning samples of beetles which were attacking oilskins, later on, fuller details obtained from Professor Petton, Liverpool School of Tropical Medicine, were forwarded to the Superintendent.

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- 3. Government Employees and Malarial Admissions.
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- 16. Sickness Returns for the Shing Mun Labour Force.
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Table I.

HOSPITAL ADMISSIONS.

NT 4.1.4		Civil ssions				<i>Victoria</i> Admissions		Victoria Gaol Admissions	
Nationality.	All	Mala- ria	All	Mala- ria	All	Mala- ria	All	Mala- ria	
Europeans Indians Chinese Others	311 1052 3441 84	3 143 67 1	745 22 1999 239	45 98 2	380 — 11 23	24 — 1 —	8 9 1117 —	40	
Nationality.	(2	hikok M) ssions	· (1	hikok F) ssions		Wah	Eas	Wah tern ssions	
l. go e e e	All	Mala- ria	All	Mala- ria	All	Mala- ria	All	Mala- ria	
Europeans Indians Chinese Others	424	131	166	22	13895	312	8117	94	
						A COMMENT OF MA			
Nationality.	Kwong Wah Admissions			tilda issions	Men	lice norial issions	1	ui Ling	
	All	Mala- ria	All	Mala- ria	All	Mala- ria	All	Mala- ria	
Europeans	14759	405	265 — — —		943	37	426	44	
Nationality.	Men	var norial nissions	Sanit	.K. torium			() () () () ()]	
	4.11	1							

All Mala-

19

causes ria

453

3

1

Chinese

Others

All

34

2 168**5** Mala-

1

43

causes ria

Table I,—Contd.

SUMMARY OF ADMISSIONS.

Nationality	All causes	. Cases of Malaria.	Percentage of admissions for Malaria.
Europeans .	2,196	94	4.28
Indians	1,085	143	13.17
Chinese	46,986	1,294	2.75
Others	347	3	0.86
Totals	50,614	1,534	3.03
	MALARIA	ADMISSIONS.	
During		$Diagnosed \ microscopically.$	$Diagnosed \ clinically.$
1st Quarter	152)		L vol. /F
2nd ,,	158	1.005	000
3rd ,,	533	1,205	329
4th ,,	691		
Totals	1,534	1,205	329

Total admissions to Government Hospitals (Including Gaol) excluding Cachexia = 577 cases.

1,000

170.

*1

. . .

Table II.

DISPENSARY STATISTICS.

Dispensary.	Total cases treated.	Malaria cases treated.	Percentage of cases of Malaria treated to total cases.
Central Western Public Shaukiwan Aberdeen Eastern Yaumati Hunghom Shamshuipo Kowloon City Tai Po Un Long Sai Kung Tai O Ruttonjee Lady Ho Tung Welfare Centre	34,056 23,868 26,022 8,705 16,960 48,002 15,900 35,436 20,222 15,950 9,897 5,257 6,391 4,748 7,094	15 549 579 616 380 493 784 1,795 1,355 817 289 389 169 210	0.04 2.30 2.22 7.07 2.24 1.02 4.93 5.06 6.70 5.12 2.92 7.40 2.64 4.42 2.82

MALARIA CASES TREATED.

ili)

Vi.	During		G 27.	Diagnosed microscopically.	Diagnosed clinically.
1st	Quarter	1,319			
2nd	, ,	1,283			
3rd	, ,	2,905		2,658	5,982
4th	, ,	3,133			
\mathbf{T}	otals	8,640		2,658	5,982
	-				

Table III.

GOVERNMENT EMPLOYEES AND MALARIAL ADMISSIONS.

Nationality.	Average No. of employees.	Malarial Admissions.	Malarial admissions per 1,000.
Europeans	881	22	24.97
Indians	1,118	130	116.28
Chinese	4,241	6	1.41
Others	95		-
Totals	6,335	158	24.94

MALARIAL ADMISSIONS.

	During		$Diagnosed\\microscopically.$	Diagnosed clinically.
1st	Quarter	9)		
2nd	"	12	140	10
3rd	,,	68	148	10
4th	,,	69	• 1	
\mathbf{T}_{0}	otals	158	148	10
	-			

Table IV.

Police Force & Malarial Admissions.

Station.	Average	Malarial
Station.	Strength.	Admissions.
Central	505	4
Upper Levels	83	1
Gough Hill		1
Sai Ying Pun	94	3
Pokfulam	9	
Aberdeen	•	-
Wanchai	111	1
Bay View		*
Shing Mun sub-station	8	-
Shaukiwan	19	
Stanley		3
Tai Tam Tuk	4	
Quarry Bay		2
Yaumati		* 3
Shamshuipo		7
Mongkok		5
Kowloon Water Works		-
Hunghom		2
Kowloon City		1
Water Police	267	3
Tsim Sha Tsui	86	
Tsun Wan	$\frac{33}{12}$	10
Cheung Chau	12	1
Tai O	20	$\frac{1}{5}$
Green Island	3	
Police Training School		1
Au Tau		3
Castle Peak	10	6
Lok Ma Chau	17	
Ping Shan		2
Sha Tin	11	11
Sai Kung		$\frac{1}{2}$
Sha Tau Kok	14	14
Sheung Shui	34	10
Tai Po	21	5
Tai Ku Ling	13	
Lin Ma Hang	12	
THE TRUE CANDIES	3.2	
Totals	1,993	106
LOUGIS	1,000	100

Table IV,—Contd.

SUMMARY OF ADMISSIONS.

Nationality.	Strength.	Malarial Admissions.	Malarial Admissions per 1,000.
Europeans	227	11	48.45
Indians	683	92	134.69
Chinese	1,083	3	2.77
Totals	1,993	106	53.18

MALARIA ADMISSIONS.

During		$Diagnosed\\microscopically.$	Diagnosed clinically.
1st Quarter	3)		
2nd ,,	5	99	
3rd . "	58	ยย	
4th ,,	40		
Totals	106	99	
100015	100		

Table V.

ESULTS OF EXAMINATION OF BLOOD FILMS (FOR MALARIAL PARASITES) TAKEN FROM PRISONERS ADMITTED TO VICTORIA GAOL.

als.	ns.	positive.	HWW WQ11141	26	1.92
. Totals.	Films.	examined.	105 88 104 105 105 105 105 145 100	1,350	11.6
New Territories.	Films.	positive.	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9	4.08
New Te	Fil	examined.	7-02141110801	147	4
Kowloon.	Films.	positive.	H00 WHHH4W	18	1.84
Kow	Fil	examined.	69 65 77 73 82 82 82 82 82 84	974	ਜ ਂ 1
Island of Hong Kong (excluding City of Victoria).	Films.	positive.		. H	1.37
Island (Kong (e	Fil	examined.	88 80 10 10 10 10 10 10 10 10 10 10 10 10 10	73	,i
City of Victoria.	ms.	positive.		H .	54
City of	Films.	examined.	11 16 26 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18	156	0.64
District according to address supplied.	Month		January February March April May June July August September October November December	Yearly Totals	Percentage

Table VI.

ANOPHELINE LARVAE EXAMINED MICROSCOPICALLY.

Totals.	5,427 6,942 6,942 6,436 1,797 1,797 1,364 2,226 2,255	43,087
A.	68	65
A. tesselatus.		
A. A. splendidus. tesselatus.	111 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	182
A. aitkenii.	855 855 17 17 26 27	549
A. karwari.	132 132 10 10 10 10	420
A. jey- poriensis.	516 891 1,759 457 176 245 461 124 124	5,227
A. hvr-canus.	2,500 3,166 1,166 1,166 1,841 542 542 542 580	15,901
A. minimus.	841 579 256 90 107 7 7 507 706 1,557 432	5,621
A. maculatus.	1,566 2,243 1,993 1,993 738 1,569 1,569 1,889 1,089	15,095
Month.	January February March April May June July September October November December	Totals

Table VII.

	Totals.	367 1,070 881 625 202 126 260 429 429 384	5,279
PUPAE.	A. vagus.		
AND P	A. tesselatus.		
FROM LARGE LARVAE AND	A. Splendidus.	m 20 C7 H	11
LARGE	A. aitkenii.	8 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	46
OUT FROM	A. karwari.	1 800 B 00 H	71
	A. jey-poriensis.	36 110 110 160 171 22 27 4	641
ES HAT	A. hyr-canus.	204 283 204 283 27 27 27 27 27 27 27 27	1,082
OSQUITC	A. minimus.	109 220 26 32 1 105 98 78 46	844
ADULT MOSQUITOES HATCHED	A. maculatus.	162 492 461 146 79 136 121 100 257 296 281	2,583
Å	Month.	January February March April May June July August September October November December	Totals

Table VIII.

RESULTS OF PRECIPITIN TESTS MADE BY M. TOUMANOFF OF THE PASTEUR INSTITUTE SAIGON, ON BLOOD TAKEN FROM ANOPHELINES CAUGHT AT VARIOUS PLACES.

	Species.	No. exa-	No. with positive reactions.	Rea	ection p	ositive	to ser	um of	Observations.
		mined.	No. pos reac	Man.	Cattle	Pig.	Dog.	Mixed	
			POI	KFUL	AM (ca	ttle by	res).		ξ
A. A.	maculatus	?	234		234		-		
C.	fatigans	7 1	$\begin{bmatrix} \bar{7} \\ 1 \end{bmatrix}$		7		agent visual		-
Ad	les mac-	?	1		1				
Ar	migeres	?	1		1				-
	Totals		245		245				
•			KOWL	OON	CITY (cattle	byres).		
	maculatus.		8		8				
	Minimus hyrcanus	5 4	$\begin{array}{c c} 5 \\ 4 \end{array}$	******	5 4				
A.	splendidus.	1	1 4		1 4				• >
	fatigans	4							e 3
_	Totals	22	22	CAMB-VALCORE	22				
1				TEK () (cattle	e sheds).		
	maculatus Minimus	32 - 43	31 41	m	31 40'		-	1	man+cattle=1
A.	hyrcanus	236	229		226 1	3		+	
A. Ae	jeyporiensis des togoi	6	$\begin{bmatrix} 1 \\ 6 \end{bmatrix}$	aga basadagan	6		german ga	er-repaided in the	
	Totals	318	308		304	3		1	
			SHI	NG M	UN (co	oolie lir	ies).		
	hyrcanus	13 2	13	13 1					
		15	14	14					anderson or the second of
_					(cattle	& nig	shelter	s)	
Ā.	maculatus!	?	9		8	—		1	cattle+pig=1
A.	minimus		1	9 0 4	1		-		
	hyrcanus jeyporiensis	4 2:	4	4 September 0	1 1	$-\frac{2}{-}$	-		cattle+pig=1
	Totals	1-	15		11	2		: 2	
		EUNC	KWA	I CH	UNG (d	cattle a	nd pig	shelter	rs).
	maculatus	?	9 (_	9				
	minimus	?	46	2	42 5	1		1	man+cattle=1
		2	5	-					
A.	jeyporiensis hyrcanus	?	5		1		_		

Table IX.

1.1.

RESULTS OF MORNING CATCHES OF ANOPHELINES AT WONG CHOK HANG VILLAGE & SURROUNDINGS (LITTLE HONG KONG).

A. selatús.	E		1 1 1	
tes	M.			
A.	ᄄ	8 ro H H	1 4 8 4 1	
. hyr	M.			
A. sulatus.	Fi	462 11	. .	15
	M.	1111		
	E-1	20 20 20 11	0.02 4 0.02	689
jeypo	M.			
nus.	Fi	186 103 169 139	448 341 505 418 372 436 373	3,701
A	M.	10 8	25.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	161
when catching took place.		25 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	304
		January February March April	May June July August September October November	Totals
	when catching A. A. took place. minimus. jeyporiensis. mac	atching when catching A.	h catching when catching shapes. A. A.	reatching when catching when catching when catching when catching took place. A. A.

0 :00 00 ...

Table X.

RECORD OF DISSECTIONS FOR MALARIAL INFECTION OF ANOPHELINES CAUGHT AT WONG CHOK HANG VILLAGE AND VICINITY (LITTLE HONG KONG.)

مددة	AND VICINI	ry (Litt	LE Hono	Kong.)	1	
Month.	Species.	No. of dissection.	No. with infected glands only.	No. with infected midgut only.	No. with infected glands & midgut.	Percentage of infection.
,		<u> </u>				
- (A. minimus	_ 169			1.	0.59
Tanyany	A. jeyporiensis A. maculatus	2 4		27	_	
January .	A. hyrcanus	7	_	1-1-1 d	_	3 -
(A. tesselatus			2		N 7 FF
	A. minimus A. jeyporiensis	86	1		===	3.55
February {	A. maculatus	2 3			1 -11 -11 -11 -11 -11 -11 -11 -11 -11 -	
	A. hyrcanus	3	_			
	A. tesselatus A. minimus	167	1	4		3.00
	A. jeyporiensis		_		-	
March {	A. maculatus					_
	A. hyrcanus A. tesselatus	1				20 -0
į	A. minimus	132		2		1.52
	A. jeyporiensis	1	_			
April }	A. maculatus A. hyrcanus	1			_	
. (A. tesselatus				_	
1 (A. minimus	1	7	1	_	2 1.95
Mary	A. jeyporiensis A. maculatus	1	-	_	_	
May }	A. hyrcanus	1			_	
, i	A. tesselatus				_	-
(A. minimus		6	9		4.61
June }	A. jeyporiensis A. maculatus	2				1 40
,	A. hyrcanus	4	_	- ·		_
	A. tesselatus A. minimus	1	4	20		5.06
(A. jeyporiensis					
July }	A. maculatus					67 4 -
	A. hyrcanus A. tesselatus			1.		50.00
	A. minimus	383	6	11		4.43
	A. jeyporiensis	2 3	_	_		
August }	A. maculatus A. hyrcanus		_	_		_
a (A. tesselatus	1	·		· · · · ·	
(A. minimus		7	3	6	4.45
September {	A. jeyporiensis A. maculatus	4				
September	A. hyrcanus				-	
, tb	A. tesselatus		111	9	5	5.73
HEED	A. minimus A. jeyporiensis			_	1	5.26-
October }	A. maculatus	1	-	_		_
(A. hyrcanus A. tesselatus		_			
	A. tesseratus		3	10	8	5.99
(A. jeyporiensis		_		_	_
November {	A. maculatus A. hyrcanus					
	A. tesselatus		_	_		
(A. minimus		1	1	1	1.45
December {	A. jeyporiensis A. maculatus	19	_	_		
December	A. hyrcanus		_	_	_	-
	A. tesselatus		_			
	A. minimus	3,507	47	72	22	4.01
(A. jeyporiensis	66		_	1	1.52
Totals {	A. hyrcanus A. maculatus			_	_	_
	A. tesselatus		_	1	_	25.00

Table XI.

RESULTS OF MORNING CATCHES, SHING MUN CAMP.

	A. tesselatus.	H H H H H H H H H H	37
	A	Z	
	A. karwari.	H	25
	kar		
	A. hyrcanus.	F. 823 252 265 125 371 40 80 1,670 551 137	4,590
SPECIES.	hyre		1
SPE	A. maculatus.	E. 34 91 91 160 103 103 103 103 103 31	856
-	macu	Z	
	A. oriensis.	F. 118 411 158 113 106 163 235 75 174 685 730	2,774
	A. jeyporien	<u> </u>	
	A. minimus.	F. 124 124 76 121 261 261 28 96 149 68 88	8 1,273
	A. minim	M.	∞
No. of mornings when	catching took place.	30 30 30 30 30 30 30 30 30 30	347
Month during which catching	took place.	January February March April May June July August September October November December	Totals

10

Table XII.

RESULTS OF DISSECTIONS FOR MALARIAL INFECTION OF ANOPHELINES CAUGHT AT SHING MUN CAMP.

Month.	Species.	No. of dissection.	No. with infected glands	No. with infected midgut	No. with infected glands &	Percentage of
		tion.	only.	only.	midgut.	infection.
(A. minimus A. jeyporiensis	100 112		1	-2	1.00
January .	A. maculatus	51		_		2.68
	A. hyrcanus A. splendidus	739				_
- (A. minimus	68 41				·
February {	A. jeyporiensis A. maculatus	33		_		
(A. hyrcanus A. minimus	229 110	-	- ₁	-	 0.91
	A. jeyporiensis	149	_	1	Management (MA)	0.91
March	A. maculatus A. hyrcanus	86 247	=	_	v	
- (A. splendidus	5 3 5		_ ₁		
	A. jeyporiensis	107	1	-		2.86 0.93
April	A. maculatus A. hyrcanus	46 119	Acceptants	_	_	_
(A. splendidus	7				-
	A. minimus A. jeyporiensis	169 98	1	2.	7 =	1.77 3.06
May }	A. maculatus A. hyrcanus	59 248		- ₁		_
_ (A. splendidus	5			_	0.40
(-	A. minimus A. jeyporiensis	245 150	6 2	5 2	Spanning Spa	4.49 2.67
June }	A. maculatus	31 37	Assertation			
(A. hyrcanus A. splendidus	2	description (IV)			
(A. minimus A. jeyporiensis	86 2 2 5	1 3	3 5 1	_	4.65
July	A. maculatus	155	3 2	1	1	3.56 2.59
, uly	A. hyrcanus	73 3		*********		
(A. karwari A. minimus	8 26	damportific	_		
(A. jeyporiensis	74	_	3	1	3.85 4. 0 5
August }	A. maculatus A. hyrcanus	100 15	=	_ 1		1.00
	A. splendidus	3	_		_	_
}	A. karwari A. minimus	91	_ ₁	4		— 5.49
	A. jeyporiensis A. maculatus	169 85	dangungan	4	_	2.37
September {	A. hyrcanus	254		1	_	0.39
	A. splendidus	2				Asserted
}	A. minimus	128 621	1 6	4 .		3.90
Ontal	A. jeyporiensis A. maculatus	100	_ 6	_ 3	_ 3	1.93
October {	A. hyrcanus A. splendidus	1,368		5	2	0.51
	A. karwari	5		-	_	
	A. minimus A. jeyporiensis	65 726	2	2 17	4	6.30 3.03
November {	A. maculatus	44	— 2	2 3	- 1	4.54
	A. hyrcanus A. splendidus	2				1.10
	A. karwari A. minimus	2 36	- 1	- 1		<u> </u>
	A. jeyporiensis	174 39	_	1 1	-	0.57
December {	A. maculatus A. hyrcanus	136	1		_	0.74
	A. splendidus A. karwari	2				_
	,					-
(A. minimus A. jeyporiensis	1,159 2,646	13 14	24 39	1 9	3.28 2.34
Totals {	A. maculatus	819	2 3	4	1 3	0.85
	A. hyrcanus A. splendidus	35	-	_ 10	_ 3	0.40
	A. karwari	24	_		_	
THE SHARE WE WINDOW	Allen Allen on Indian American Street Control of the Control of th	A STATE OF THE STA	,			

Table XIII.

RESULTS OF DISSECTIONS FOR LARVAL FILARIAE OF MOSQUITOES CAUGHT AT VARIOUS PLACES.

Locality.	Species.	No. of dissection.	No. of infection.	Percentage of infection.
Shing Mun Camp.	A. minimus A. jeyporiensis A. maculatus A. hyrcanus A. splendidus A. karwari A. minimus A. jeyporiensis A. maculatus	1,159 2,646 819 4,012 35 24 93 72 161	1 5 3 1 —	0.09 0.19 0.37 0.02 — —
Wong Chok Hang Village.	A. hyrcanus A. minimus A. jeyporiensis A. maculatus A. hyrcanus A. tesselatus	3,507 66 16 30 4	18 3 —	0.51 4.55 —

RESULTS OF EXAMINATION OF BLOOD FILMS (FOR MICROFILARIA) TAKEN FROM PRISONERS ADMITTED TO VICTORIA GAOL. Table XIV.

als.	ms.	positive.	HEN 22H 42	14	94
Totals.	Films.	examined.	105 88 104 104 105 105 105 145 145	1,350	1.04
New Territories.	Films.	positive.	+-4		0.68
New Te	.E .	examined.	17 11 11 11 10 36 10 10	147	0
Kowloon.	Films.	positive.		σ.	76.0
Kow	E	examined.	69 65 77 77 100 88 100	.974	0.
Island of Hong Kong (excluding City of Victoria).	Films.	positive.		-1	1.37
Island of Kong (e City of	Fi	examined.	88884981	(fire73)	T
City of Victoria.	Films.	positive.		ю	1.92
City of	- Fil	examined.	25 27 28 28 28 28 28 28 28	156	1.
District according to address supplied.	Month.		January February March April May June July August September October November	Yearly Totals	Percentage

Table XV.

BRSULTS OF SPLEEN CENSUS OF CHILDREN.

Remarks.	Patheung Valley	do.	do.	qo.	do.	do.	Stanley Peninsula
Percentage.	80.77	10.00	15.39	60.6	16.60	21.74	28.57
No. of children found with enlarged spleens.	œ	 1) 4	5	7	ro	63
No. of children examined.	26	10	. 97	22	42	73	7
Locality.	Yuen Kong	Shui Lau Tin	Lin Fa Tu	Sheng Tsun	Wong Toi Shan	Kam Tin	Wong Ma Kok

Table XVI.

SICKNESS RETURNS FOR THE SHING MUN LABOUR FORCE.

Month.	Race.	Average population.	Malaria cases diagnosed micros- copically.	No. of cases of sickness from all causes.	No. of deaths.
January .	Cantonese Shanghai Indians Totals	1,143 696 18 1,857	10 39 — 49	102 202 4 308	1§+1*=2 - 2
February {	Cantonese Shanghai Indians Totals	1,240 664 18 1,922	12 — — 17	149 193 4 346	1
March {	Cantonese Shanghai Indians Totals	1,143 704 17 1,864	3 18 — 21	124 258 9 391	$\frac{1}{1}$
April $\left\{ \right.$	Cantonese Shanghai Indians Totals	1,159 786 16 1,961	4 7 ———————————————————————————————————	124 298 2 424	5 §
May {	Cantonese Shanghai Indians Totals	1,101 811 16 1,928	1 23 — 24	151 370 3 524	5 2 3 3 5
June {	Cantonese Shanghai Indians Totals	1,184 812 16 2,012	22 65 — 87	156 418 7 581	2§ 2 1§
July {	Cantonese Shanghai Indians Totals	1,354 616 16 1,986	42 99 — 141	198 305 2 505	$1*+2\S = 3$
Λ ugust $\left\{ ight.$	Cantonese Shanghai Indians Totals	1,307 547 16 1,870	28 79 — 107	154 323 6 483	1 § 1* — 2
${\bf September} \left\{ \begin{array}{c} \\ \\ \end{array} \right.$	Cantonese Shanghai Indians Totals	1,323 648 17 1,988	29 69 — 98	149 300 2 451	2 2 8 - 2
October \cdot	Cantonese Shanghai Indians Totals	1,442 675 17 2,134	31 91 1 123	152 312 4 468	1*
November	Cantonese Shanghai Indians Totals	1,376 742 17 2,135	45 173 — 218	139 393 5 537	$5*+1\S = \frac{2\S}{6}$
December. $\left\{ \right.$	Cantonese Shanghai Indians Totals	1,384 640 17 2,041	23 66 — 89	152 302 5 459	1
	Totals		985	5,477	25§ $+9* = 34$

DETAILS OF EXAMINATION OF BLOOD FILMS FOR MALARIA, SHING MUN.

Nationality.	B.T.	S.T.	Q.	Q. & B.T.	B.T. & S.T.	Type not classi- fied.	Totals.
Cantonese	72 225 1	73 278 —	6 10 —	1	1 3 —	90 225 —	243 741 1
Totals	298	351	16	1	4	315	985

[§] Deaths due to other causes.

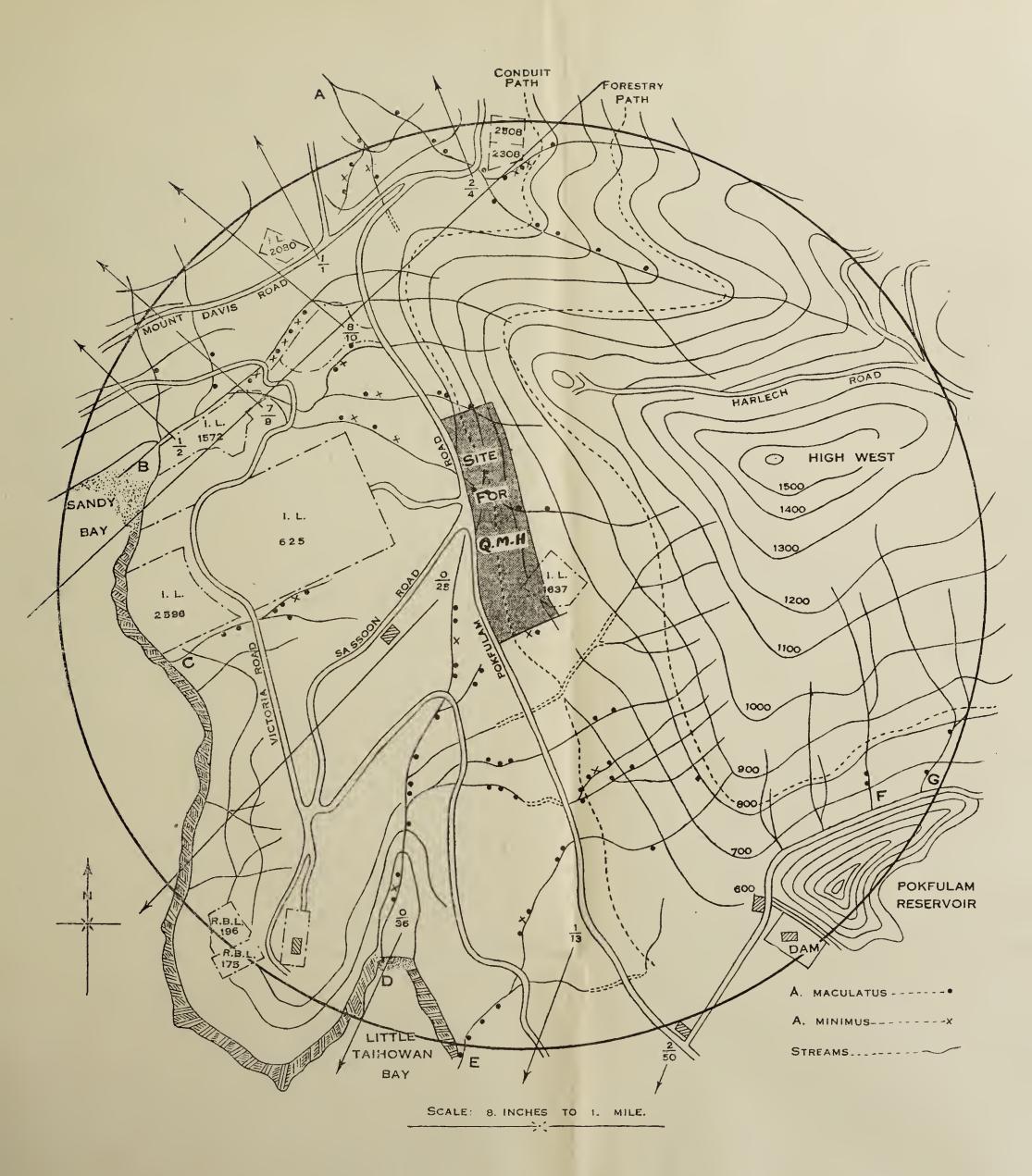
^{*} Deaths due to malaria.

Table XVII.

ARIA CASES RATE PER 1,000 POPULATION 1933, 1934 and 1935, SHING MUN CAMP.

IP.	Case rate per 1,000 population.	26.4 8.8 11.3 5.6 12.4 43.2 49.3 57.2 49.3 57.6 102.1		Case rate per 1,000 Population.	900
SHING MUN CAMP.	No. of malaria cases treated.	49 11 21 11 24 87 107 107 98 123 218 89	1935.	Total No. of malaria cases treated.	100
· ·	Average population.	1,857 1,922 1,922 1,928 2,012 1,986 1,988 2,134 2,135 2,041		Average To Monthly De Population.	1 074
1934 and 1935,	Case rate per 1,000 population.	69.1 13.2 14.5 16.2 41.5 48.5 62.1 45.4 38.2			
1933,	No. of malaria cases treated.	54 14 16 8 14 71 71 116 86 86		of Case rate per 1,000 Population.	797
ULATION	Average population.	782 1,057 1,096 933 976 865 989 1,734 1,866 1,894	1934.	Total No. of malaria cases treated.	. E06
MALARIA CASES RATE PER 1,000 POPULAT	Case rate per 1,000 population.	2.6 15.2 6.7 61.5 108.5 247.8 276.6 237.9 239.9 95.4		Average Monthly Population.	1 006
RATE PER	No. of malaria cases treated.	 4 40 83 171 177 188 195 166 64		Case rate per 1,000 Population.	1 0/0
IA CASES	Average population.	290 460 650 650 765 690 640 797 692 671	1933.	Total No. of nialaria cases treated.	1 006
MALAR	Month.	January February March April May June July August September October November December		Average To Monthly m Population.	202

	Case rate per 1,000 Population.	498
1935.	Total No. of malaria cases treated.	982
	Average Monthly Population.	1,974
	Case rate per 1,000 Population.	463
1934.	Total No. of malaria cases treated.	. 596
	Average Monthly Population.	1,286
	Case rate per 1,000 Population.	1,842
1933.	Total No. of malaria cases treated.	1,096
	Average Monthly Population.	295





Appendix C.

1.(16

GOVERNMENT LABORATORY.

Report of work done during the year 1935 have

Mr. A. Jackson-Acting Government Analyst.

- 1. The work of the Laboratory can be divided into three main classes.
- (1) Official Work, i.e. work for other Government Departments and for which the Laboratory primarily exists.
- (2) Semi-official Work, i.e. work done by the Laboratory by virtue of it being a Government Department, e.g. work from the Naval & Military Authorities etc. Fees are charged for this work. In the case of the Naval & Military Authorities the work is charged at half rate only.
- (3) Unofficial Work, *i.e.* work done by the Laboratory for outside firms in competition with private consulting analysts and for which full fees are charged.
- 2. The total number of analyses dealt with under all these heads for the year 1935 was 3,931 against 3,728 for 1934.
- 3. The following tables show the nature of the work under the three heads.

Official Work.

	1934.	1935	•
Chemico-Legal Samples, from the Police & Medical Departments	171	330)
Food & Drug Samples under the Ordinance from the Sanitary Department	139	288	3
Water Samples, from Public Supplies	2,014	1,958	}
Dangerous Goods under the Ordinance from		1 1	
the Police Department & Fire Brigade	10	25	5
Bio-chemical Examinations, from the Medical	٠,	Ψ _{1 − μ1} 1 − μ1	
Department & University	166	132	}

1934.	1935.		
22	5		
232	266		
- 4	23		
76	12		
7	3		
26	· · · · · · · · · · · · · · · · · · ·		
3.	13		
5	33		
11	8		
2,886	3,115		
-			
4. Value of work done for Government Departments, as determined under the Tariff of Fees (Government Notification No 887 of 1932) was \$49,425.00 against \$46,985.00 for 1934.			
ent No	otification		
ent No	otification		
ent No	otification		
ent No .00 for	otification 1934.		
ent No .00 for 1394.	otification 1934. 1935.		
ent No .00 for 1394.	1934. 1935.		
ent No .00 for 1394. 12	1934. 1935. 7		
ent No .00 for 1394. 12	1934. 1935. 7		
ent No.00 for 1394. 12 3 43	1934. 1935. 7		
ent No.00 for 1394. 12 3 43	1934. 1935. 7		
	22 232 4 76 7 26 3 5 11		

Battery Acids

Chemicals

Miscellaneous

1.

Value of work done under this head was \$3,525 as against \$4,714.75 for 1934.

Unofficial Work.

	1934.	1935.
Foodstuffs	93	14
Bio-chemical Examinations	1	10
Toxicological ,,	0	4
Water samples	22	22
Building Materials	10	-2
Oils, Fats & Waxes, including petroleum		
	61	231
products Minerals & Metals	406	345
Dangerous Goods	9	15
Chemicals	13	29
Fertilizers	7	-0
	14	7
Miscellaneous	14	-
	636	679

Value of work done under this head was \$28,850.00 as against \$30,111.00 for 1934.

Official Work—Chemico-Legal Samples.

5. The following table shows the nature of the work done under this head.

	1934.	<i>1935</i> .
Toxicolocal Examinations	135	170
Counterfeit Coins & Materials	13	113
Bombs & Explosives	3	1
Articles for Stains	2	7
,, ,, fire enquiries	11	7
,, connected with Larcency	0	2
,, ,, Forgery (Bus ticket)	0	13
Robbery with violence.	· O	8
Dangerous Goods	1	4
Other examinations	7	5

6. A considerable increase in the amount of this work took place during the year 1935. The greater proportion of this increase was due to the prevalence of coinage offences. Several of the samples of coins submitted for analysis were found on persons arrested in places which suggested that the source of these counterfeits was outside the Colony. In all these cases it was found that the coins were made of an alloy whose approximate composition was tin 5 parts, antimony 2 parts and copper 1 part.

On several occasions, complete coiner's outfits were submitted for examination by the Police, and in the subsequent legal proceedings, evidence given by the Government Analyst and staff materially assisted in the conviction of the accused persons.

- 7. In two cases of robbery with violence, pepper was used as a blinding agent. In each case samples of clothing were examined and found to be sprinkled with pepper. In one case parings from the nails of the accused were found to contain all the essential microscopic structures of pepper amongst the other debris.
- 8. Two cases of petty larcency are of interest. The persons were arrested for damaging signboards by rubbing off the "gold leaf" characters with cotton waste. When charged the defendants stated that they intended to recover the gold from the waste. At the subsequent Court proceedings minute gold beads obtained from the samples were produced as evidence.
- 9. During the year specimens of urine from persons accused of offences whilst under the influence of alcohol were examined. In one case a specimen of urine, taken after the accused had been in custody twenty-four hours, was found still to contain 50 mgms. of alcohol per 100 ccs. urine.

Toxicological Examinations.

Nature of poison.	No. of samples.
No poison found	61
Opium (including 3 cases of morphine)	30
Barbituric acid derivatives	7
Phenolic or cresolic compound	
Potassium cyanide	3
Hydrogen peroxide	
Candle nut oil	
Sodium & Potassium bromides	
Stockholm tar	
Salicylic acid	
Medicine (under P. & P. Ordinance)	
Nitric acid	
Gelsemium elegans	1
Chinese medicine	1
Turpentine	
Quinine	5
Strychnine	
Saccharin	
Arsenic	
Manganese compound	
Animal toxins	7
TARREST COMMENTS OF THE PROPERTY OF THE PROPER	• • • • •

- 10. Again it has to be reported that a considerable increase in the amount of this work has to be noted. For suicidal purposes poisons of the lysol type and opium were the favourite agents.
- 11. The samples containing strychnine were from a case of accidental poisoning by a Chinese Medicine Cake which was labelled for external use on bruises: Strychnine to the amount of 5/6 grains was found in the P. M. Materials. At a later date the Medicine cakes were submitted and found to contain 15% of strychnine.
- 12. The one case of arsenic poisoning was from a subject who had been treated with organic arsenical compounds. Arsenic was found in the various organs submitted for examination.

Food & Drugs.

13. The table below gives the details of the Food & Drug Samples submitted by the Sanitary Department under the Ordinance.

Substance.	No. of samples examined.	No. found genuine.	No. found adulterated.
Biscuit Bread Butter, fresh ,, tinned Cheese Coffee Flour Fruit, tinned Jam Lard Milk, fresh ,, tinned Mustard Oil, ground nut Rice Sugar Sweets Tea Vegetable, tinned Vinegar	6 48 13 2 1 14 36 1 1 10 81 7 1 13 3 9 18 21 2	6 48 13 2 1 14 35 1 1 9 77 7 1 13 3 9 18 10 1	
Total	288	270	18

14. An increased number of samples were examined as compared with the previous year. It is to be regretted that even now the amount of Food & Drug work done under the Ordinance is far below that which is necessary for a Colony of this size. At least 3,000 samples per year should be examined.

The reason for so few samples being submitted is due probably to the state of the Regulations covering the sale of Food & Drugs. During 1935 the only foodstuff with a defined standard was milk.

The present unsatisfactory state of affairs will no doubt be materially improved when the Sale of Foods & Drugs Ordinance 1936 and its attendant Regulations become operative.

15. The abnormally high percentage of adulteration found in the tea samples is due to the demand for a low-priced tea. Also amongst the lower classes tea stalk is a recognised commodity and several of the samples, reported as adulterated, consisted entirely of stalk.

Water Samples.

- 16. During the year the regular routine examinations of the local water supplies were carried out and again it is to be reported that they were above reproach.
- 17. In connection with the water supplies samples from one district suddenly showed a large increase in the free ammonia figures. On enquiry, it was found that the Water Authorities had been experimenting with a chlorinating method which involved the presence of ammonium salts.
- 18. Besides routine examinations, numerous samples were analysed after complaints had been made by consumers. On one occasion the contamination was found to be lead. The source of the lead was traced to the paint which had been used for the protection of the storage tank.

Dangerous Goods.

19. These were samples of oils from lighters etc. for flash point, and explosives for identification in connection with the enforcement of the Ordinance.

Bio-chemical Examinations.

Blood for blood urea nitrogen & blood sugar 17	Samples.
,, ,, ,, urea nitrogen 14	,,
,, ,, ,, sugar	,,
,, ,, chloride 1	
Urine	
Calculii	, ,
Stool	,,
m , 1	C 1
Total 132	Samples.

20. A slight diminution in the number of these samples took place during the year. The investigation of the nature of various stones, removed from the human bladder by the Professor of Surgery to the University, has been continued by the complete analysis of a further 22 samples. A paper on this subject was read by a member of the Hong Kong University Surgical Unit at a Medical Congress in Canton and acknowledgment of the services of the Government Laboratory was recorded.

Materials from Government for testing.

- 21. The number of samples of materials submitted by Government Departments for testing was approximately the same as last year. As stated in the 1934 report, it is to be regretted that some departments do not take advantage of the facilities available in the Laboratory for ensuring that Government receives genuine materials of the highest quality.
- 22. During the year every large consignment of coal for the Harbour Department and P.W.D. was sampled and tested in order to arrive at the price to be paid to the contractor. Complaints regarding the quality of the smaller consignments occurred during the year. When samples were submitted in each case it was found that coal of a quality vastly inferior to that stipulated in the contract was being supplied.
- 23. More funigation work with Hydrocyanic Acid gas has been carried out on books and documents for the Colonial Secretary's Office and other departments. In cases where a suitable room was not available a funigation box in the Laboratory was found to be efficient.

Semi-official Work.

- 24. The tanks of 32 ships were tested for inflammable vapour with the Clowes Redwood apparatus. The majority of the other work under this head was for the Naval & Military Authorities.
- 25. Further examinations were made of the atmosphere in submarine battery rooms during charging. The Naval Authorities' portable McLuckie hydrogen apparatus was tested and recalibrated in the Laboratory on several occasions by means of standard mixtures of hydrogen and air.

Unofficial Work.

- 26. There has been an increase in the number of samples submitted to the Laboratory under this head. This has been due chiefly to the increased demand for lard samples.
- 27. During the early part of the year discrepancies between Hong Kong and London assays of tin were reported. In order to eliminate the possibility of analytical errors samples of tin were interchanged with the London assayers and in each case

the figures were confirmed. At the time it was suggested that sampling was the cause of these discrepancies. Advantage was taken of the presence in London of Mr. Branson, Government Analyst; who investigated the problem of tin sampling. As a result modifications of the London method of sampling has taken place.

28. Wolfram ore, refined tin and lard are the three principal materials submitted from non-official sources. In the case of lard an increase of 300% has taken place:

Sampling:

29. The following list gives the amount of sampling done by the Sampler attached to the Laboratory.

Tin	3,668	Tons.
Lard1	19,211	Cases.
Ghee	147	, ,
Wood-Oil	75	Tons.
Cassia Oil	5	Drums.
Firecrackers	2,973	Cases.
Manganese ore		Tons:
Bismuth ore	4	<u>.</u>
Water samples	1,798	Samples.

Special Investigations.

30. As mentioned elsewhere further work was carried out on the composition of urinary stones. An investigation into the pollution of bathing beaches by sewage was attempted on the lines of the Colombo Harbour experiments (Rae. Journal of the Institution of Municipal & County Engineers 1924 p. 1074). Owing to the high dilution of sewage caused by the open nature of the beaches no reliable inferences could be drawn from the analytical figures and the investigation had to be abandoned. Owing to the absence of Mr. Branson, Government Analyst and the pressure of chemico-legal work no fresh investigations could be initiated.

Staff & Equipment.

31. Mr. Branson, Government Analyst, was on leave during the whole of 1935. During this period he pursued a course of study and was successful in gaining the F. I. C. in Branch E. Mr. Branson also attended the 41st Regimental Anti-gas Instructions course at Winterbourne Gunner and obtained the qualification "Distinguished".

Mr. Jackson continued to act as Government Analyst durings the year.

32. The provision of forced draught in the main Laboratory has at last been successful.

Revenue.

33. The fees paid into the Treasury during the year amounted to \$30,773.50 as against \$32,968.75 in 1934. The value of the work done both Government and Commercial, as determined from the Tariff of Fees (Government Notification No. 887 of 1932) was \$81,832.70 as against \$81,014.75 in 1934.

EXPENDITURE FOR 1934 AND 1935 COMPARED

· ant b = .	1934.	1935.
Personal Emoluments	\$39,150.42	\$32,673.65
Other Charges:—		-0.
Apparatus & Chemicals	3,838.43	2,383.79
Books_&_Journals	169.24	175.17
Conveyance Allowance	180.00	180.00
Fuel & Light	797.22	707.77
Incidental Expenses	287.40	309.56
Uniforms	103.50	74.15
Other charges total	\$5,375.79	\$3,830.44

REVENUE FOR 1934 AND 1935 COMPARED.

Head of Revenue.	1934.	1935.
Analyses	\$32,968.75	\$30,773.50

EXPENDITURE & REVENUE FOR THE PAST TEN YEARS.

Year.	Expenditure.	Revenue.
1926	\$34,776.52	\$16,422.50
1927	37,442.88	16,146.00
1928	29,333.98	15,562.00
1929	35,390.43	24,974.00
1930	44,677.95	19,891.50
1931	57,341.16	19,295.50
1932	50,746.44	30,604.00
1933	52,494.16	42,347.50
1934	44,526.21	32,968,75
1935	35,678.42	30,773.50

Appendix D.

UNIVERSITY CLINICAL UNITS AT THE GOVERNMENT CIVIL HOSPITAL.

MEDICAL UNIT.—Report by the Professor of Medicine.

PROFESSOR WILLIAM I. GERRARD, O.B.E. M.D., Ch.B.,

M.R.C.P. (Lond.) D.P.H.

Inpatients.

Cases treated as in-patients in the University Teaching Medical Wards:—

Men	219
Women	83
Children under 12	80
Total:—	382
Number of cases died	38
Number of cases died within 24 hours after admission into hospital	9
Total deaths:—	47

Remarks:—

Tuberculosis:—51 cases of which 37 were of the pulmonary type. The numbers seeking admission have been very much greater but our method has been to admit only early cases of the disease in whom there is a possibility of improving the condition by means of pneumo-thorax. The beds are unfortunately very limited in number and many suitable cases cannot be treated.

Cardio-Vascular Diseases:—Numbers of both the Rheumatic and Syphilitic type appear to be on the increase.

Nervous Diseases:—Few cases of Multiple Neuritis appear, most in an advanced state. This is a pity because of all diseases of the nervous system that of multiple neuritis has the most satisfactory prognosis.

Etiology: -Malnutrition of the deficiency type and exposure.

Children's Diseases:—Hospital treatment practically impossible because of lack of accommodation.

Special Tests.

The following special tests have been carried out: --

From January to December 1935.

A set to the

Blood Urea	65
Blood Sugar	9
Blood Sedimentation Rate	354
Fractional Test Meals	95

Research.

The following members of the staff have carried on research work in the wards of the Medical Unit:—

Dr. Lim Gim Kheang
Dr. Lew Khoon Shin
Dr. Chiu Put Po
Dr. Lo Chong Fie

— H.P.
— H.P.
— H.P.
— Clinical Assistant.

- (1) Investigations on the Blood Sedimentation Rate in various diseases.
- (2) Investigations on the Reticulocyte response in the treatment of some forms of Anaemia.

The pneumo-thorax clinic for suitable cases of pulmonary tubercules is being continued with success. Unfortunately some cases are too far advanced for satisfactory results. In many cases, however, the patients have been rendered fit to resume ordinary routine of life.

Outpatients.

Cases treated as outpatients at the University Medical Outpatient Clinics:—

- 1. Morning Clinic (General Medical Cases) Thursdays and Saturdays:—
 665 cases seen and treated (men, women and children).
- 2. Afternoon Clinic (General Medical Cases) Mondays and Thursdays:—
 932 new cases seen and treated (men, women and children): many of these cases attended more than once, bringing to a total of 7,410 cases.
- 3. Children's Clinic, Thursday mornings:—
 258 new cases seen and treated: many of these cases attended more than once, bringing to a total of 1,630 cases. Acute bronchitis shows a high incidence.

The total cases seen and treated by the Medical Unit at Out-patient Department during the year 1935 was 9,705 (this figure included old and new cases, men, women and children)

REMARKS: -

Tuberculosis:—The number of pulmonary tuberculosis cases is very high.

Other diseases of the Respiratory System show a large number of cases of both acute and chronic bronchitis.

Opium Addicts.

In-patients:—Number of cases admitted to the University Medical Clinic from January to the end of December 1935 was 37.

Duration of Treatment: -

Less than 5 days	1	case
5 to 20 days	33	cases
Over 20 days	2	,,
Average number of days in Hospital	13	(approx.)
Longest duration in Hospital	24	days
Shortest duration in Hospital	1	day

Method of Treatment:—As in previous years the method of complete and instant withdrawal of opium has been followed. This has been possible because the cases admitted are not of a severe type—almost without exception our patients have been young men who have developed a moderate degree of addiction as a result of commencing the smoking habit "for amusement." They were smokers of what they call "smuggled opium" and not "dross." The average daily cost is about one H.K. dollar a day. These addicts applied for admission with a view to cure as economic conditions render the purchase of opium difficult.

As an adjunct the Modinos method of treatment by means of vesicatory serum has been used. The efficacy of the latter method is extremely difficult to assess. I am extremely doubtful that any real immunity to drug addiction as claimed by Modinos is ever developed.

Result of Treatment:—

Relieved	35	cases
Unchanged	1	case
Under treatment	1	3 2

42 opium addicts attended at the outpatient department for treatment. These cases refused to enter hospital. Outpatient treatment of addiction can never be successful.

No cases have returned for re-admission. There is no follow-up system in Hong Kong and as a result there are no reliable figures of relapses.

My experience compels grave doubts of the so-called disastrous effects, moral and physical, of moderate opium addiction as noted in the type of case admitted to the Medical Wards at the Government Civil Hospital.

Investigations in regard to the effects of opium addiction on gastric function have been continued and a paper on this subject is in progress of publication. A total of more than 150 cases have been submitted to a fractional test meal.

SURGICAL UNIT—Report by the Professor of Surgery, Professor Kenelm H. Digby, M.B., B.S., F.R.C.S. (England).

407 inpatients were treated in the three wards of the Surgical Clinic at the Government Civil Hospital.

758 surgical operations under anaesthesia were performed.

The out-patient attendance in the Surgical Clinic numbered 2,709 (new patients).

1,252 patients attended the Ear, Nose and Throat Clinics (new patients).

There were also 3,103 patients who attended the Ophthalmic Out-patients Clinic (new and old patients).

The development of the Clinical Museum in the School of Surgery has been slowly continued.

There is great need of an endowment for a research fellowship in surgery.

The Department is greatly indebted to the Government Analyst, Mr. V. C. Branson, and Mr. A. Jackson, for their careful chemical analyses of vesical calculi reported in a paper read by Dr. Lien at the Third General Chinese Medical Conference at Canton.

We continue our indebtedness to the Trustees of the Matilda Hospital for the loan of radium needles, and to Dr. J. H. Montgomery for his help. The work of radiotherapy is, however, greatly limited by the absence of any deep x-ray appliances. To treat malignant growth with radium without deep x-rays is like going into battle with bayonets but no bullets.

Every week a staff round is held from 5 to 6 p.m. on Mondays which general practitioners and other qualified men are welcome to attend.

OBSTETRICAL AND GYNAECOLOGICAL UNIT.

Report by the Professor of Obstetrics and Gynaecology.

PROFESSOR W. C. W. NIXON, M.D., B.S. (Lond.),

F.R.C.S. (Eng.) L.R.C.P. (Lond.), M.C.O.G.

Statistics of Maternity Cases in the Maternity Block	ck, G.C.H.:	
Admissions (University cases)	813	
Deliveries (University cases)	758	
Deaths (University cases)	8	
Stillbirths	39	
Total deliveries of M.O. i/c. cases	193	
Total number of deliveries	951	
Classification of University Cases: —		
Vertex Presentations	710.	
P. O. P	8,	
Breech	27	
Transverse	4.	
Twins	6	
Mole	1.	
Brow	1	
Face	1	
Totals:—	758	
200000		
Number and Nature of Abnormal Case	es	
Placenta Praevia	7	
P. P. H	40	
Prolapse of cord	4	
Hydramnios	3	
Eclampsia	7	
Vesicular Mole	1	
Twins	6	
Forceps	29	
Manual Removal of Placenta	4	
Accidental Haemorrhage	2	
Pertoration	1	

Causes	of M	aternal	Deaths.
--------	------	---------	---------

2

56

Nil.

Lobar Pneumonia

Accidental Haemorrhage	. 1	
Placenta Praevia	. 1	
Eclampsia	. 3	1
Chronic Parenchymatous nephritis	. 1	
Total:—	. 8	
		1 1 - 1 - 1 - 1 - 1 - 1 - 1
$Ante-natal\ Clinics.$		
Attendances:	i i	
New cases	235	i i
Old ,,	151	
Total:—	386	
		i i jaka sila i i i i i i i i i i i i i i i i i i i
Statistics of Gynaecological Department	1935.	inductus Disolata
Number of admissions	124	
Number of operations performed	68	

Number of cases treated without opera-

Total number of attendances of out-

patients department 1,960

tions

Deaths

Return of Diseases and Deaths (In-Patients) for the Year 1935.

Appendix E.

	GOVERNMENT HOSPITALS. CHINESE HOSPITALS												
* Diseases.	ing in tal at 1934.	Yearly	Total.	d.	ng in al at 1935.	ing in tal at 1934.	Yearly	Total.	ases ed.	ng in			
Discases.	Remaining Hospital e	Admis-sions.	Deaths.	Total Cases Treated.	Remaining ir Hospital at end of 1935.	Remaining Hospital a end of 193	Admissions.	Deaths.	Total Cases Treated.	Remaining Hospital			
I.—Infectious & Parasitic Diseases.													
1. Typhoid fever	3	63	15	66	3	1	136	51	137				
2. Paratyphoid fevers		4	1	4			2		$\frac{2}{2}$				
3. Typhus fever4. Relapsing fever													
5. Undulant fever	-									_			
6. Small-pox:							7	1	7				
(a) Variola major					-			1	'				
trim													
7. Measles	, —	42		42			24	1	24				
8. Scarlet fever	1	6		7 7	2								
9. Whooping cough	4	$\begin{array}{c} 7 \\ 42 \end{array}$	18	46	1	4	158	108	162				
11. Influenza	7	579		586	3	18	1,229	138	1,247	2			
12. Cholera										_			
13. Dysentery:	è	0		0			139	K.C.	140				
(a) Amœbic (b) Bacillary	1	$\begin{array}{c} 9 \\ 242 \end{array}$	$\frac{2}{10}$	$\begin{array}{c} 9 \\ 243 \end{array}$	2	1	75	56 12	$\begin{array}{ c c }\hline 140\\ 75 \end{array}$				
(c) Other or unspecified		11	1	11		9	222	85	231	1			
14. Plague :—													
(a) Bubonic		p							p-10-10-10-10-10-10-10-10-10-10-10-10-10-				
(b) Pneumonic													
(c) Septicæmic		2		2	-	1	21	2	22				
16. Acute poliomyelitis		1		1	-		2		2				
17. Encephalitis lethargica		3		3	_	a	4	1	4				
18. Cerebro-spinal fever		10	6	10°			80	31	80				
19. Glanders	·				And with Allian								
21. Rabies		3	3	3	†								
22. Tetanus		6	4	6			67	61	67				
23. Tuberculosis of the re-	19	117	37	136	11	113	1,968	1,061	2,081	5			
spiratory system	10	11,	31	100	11	110	,,,,,,,	2,001	2,001				
nervous system	-	15	15	15		4	174	133	178				
25. Tuberculosis of Intestines		0	E	0		-	35	16	9.6				
and peritoneum		9	5	9		1	59	16	36				
26. Tuberculosis of vertebral column		3		3			23	5	23				
OOT QUALIT	-						4.076	1 500					
Carried forward	35	1,174	117	1,209	22	152	4,373	1,762	4,525	18			

^{*} NOTE.—From the International list of Causes of Death.

Appendix E.

		dovern:	MENT I	Hospita	Ls.	CHINESE HOSPITALS.						
	Remaining in Hospital at end of 1934.	Yearly suois.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at end of 1934.	Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.		
Brought forward	35	1,174	117	1,209	22	152	4,373	1,762	4,525	135		
I.—Infectious & Parasitic Diseases.—(Contd.)						,						
Tuberculosis of other bones and joints Tuberculosis of skin and subcutaneous tissues	2	9		11	5	17	50 12	13	67 12	13		
Tuberculosis of the Lymphatic system		11		11		7	68	33	75	13		
Tuberculosis of Genito- urinary system Tuberculosis of other organs		2	_	2	1	. —	1	_	1			
Tuberculosis of other organs Disseminated tuberculosis Leprosy	-		5 	 6 5	_ 1 _	2 	12 21	10 2	$egin{array}{c} \ 14 \ 21 \end{array}$	_		
(a) Congenital (b) Primary (c) Secondary (d) Tertiary Other venereal diseases:— (a) Gonorrheal ophthal-	- 3 - -	9 52 6 19	3 — 2	9 55 6 19	 1 5	10 5	13 8 153 58	11 - 29 14	13 8 163 63			
mia	5 	5 228 71		5 233 71	$-\frac{6}{2}$	1 1 —	13 119 2	2 	14 120 2	5 		
(a) Septicæmia		1 	1 — —	1 		_	_		_			
Malaria :— (a) Benign Tertian (b) Quartan (c) Sub-Tertian (d) Cachexia (e) Blackwater fever Other diseases due to pro-	3 4 	145 10 221 8 —	9 	148 10 225 8	3 — 8 — —	8 1 	306 40 363 137	61 — 96 10 —	314 40 364 137	1 5 11 —		
tozoa :— Kala-azar Trypanosomiasis Yaws Ankylostomiasis Hydatid cysts			_ _ _ 1		_ _ _ _ 1 _					= 00		
Carried forward	59	2,001	138	2,060	55	204	5,785	2,060	5,989	194		

Appendix E.

	G	OVERNA	ENT H	OSPITA	Ls.	CHINESE HOSPITALS.						
	Remaining in Hospital at end of 1934.	Yearly sions.	Total.	Total Cases Treated.	Remaining in Hospital at end of 1955.	Remaining in Hospital at end of 1934.	Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at		
Brought forward	59	2,001	138	2,060	55	204	5,785	2,060	5,989	15		
I.—Infectious & Parasitic Diseases.—(Contd.)												
42. Other diseases due to helminths:— Ascariasis Filariasis Tæniasis Clonorchiasis 43. Mycoses:— (a) Actinomycosis (b) Other mycoses Sprue 44. Other infectious or parasitic diseases:— (a) Vaccinia (b) Other sequelæ of vaccination (c) German measles (d) Varicella (e) Mumps (f) Dengue (g) Glandular fever (h) Others		28 2 10 8 — 5 — 6 8 4 —	1	28 3 10 8 - 5 - - - - 6 9 4 - -		2	34 2 - - 5		36 2 - - 5 - 1 1 - -			
II.—Cancer and other Tumours.												
45. Cancer or other malignant diseases of the buccal cavity, and pharynx 46. Cancer or other malignant tumours of the digestive	5	15	5	20	5		14	11	14			
tumours of the digestive organs, and peritoneum:— (a) Oesophagus		2 6 —	1 2 —	2 6		1 -	8 22 4	6 11 4	9 22 4	1 5 1		
(d) Liver and biliary passages	_	10 2	3 2	10 2		_	8 10	6 3	8 10			
47. Cancer or other malignant tumours of the respiratory organs	_	3	3	3		1	2	2	3	-		
Carried forward	66	2,110	155	2,176	64	208	5,896	2,103	6,104]		

Appendix E.

•	(GOVERNI	MENT I	Hospita	LS.		CHINE	se Ho	SPITALS	
Diseases.	Remaining in Hospital at	Admis-sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at	Yearl: -simpy -sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.
Brought forward	66	2,110	155	2,176	64	208	5,896	2,103	6,104	196
$-Cancer\ and\ other\ Tumours. \(Contd.)$										
Cancer or other malignant tumours of the uterus Cancer or other malignant tumours of other female	2	40	1	42			31	20	31	
genital organs Cancer or other malignant		_					39	9	39	1
tumours of the breast Cancer or other malignant	3	12		15	1		17	11	17	2
tumours of the male genito urinary organs Cancer or other malignant	_	4	1	4	2		11	2	11	1
tumours of the skin Cancer or other malignant	*****			**************************************		2	9	6	11	
tumours of organs not specified	2	13	. 2	15	2		4		4	
(a) Female genital organs (b) Other sites		63 26	_	63 26	7	4	71 21	3	75 21	2
nature:— (a) Female genital organs (b) Other sites	-	_2		2	_	_	_1	1	_1	_
-Rheumatism, Diseases of trition and of Endocrine lands, and other General Diseases.										
theumatic fever	Company of the Control of the Contro	5	1	5	1	3	24	2	27	-
(a) Chronic rheumatism . (b) Rheumatoid arthritis,	1	9		10	1	4	116		120	14
Osteoarthritis	2	16		18	1	3	53 ·	*******	56	1
oiabetes mellituseurvy:—	_	4	3	4	1		25	3	25	
(a) Infantile scurvy (b) Scurvy			_		_		_		_	,
Carried forward	76	2,304	163	2,380	80	224	6,318	2,161	6,542	217

Appendix E.

		G	OVERNM	ENT H	OSPITAI	Ls.		CHINE	se Hos	PITALS.	
Diseases.	ng in		Yearly	Total.	ases ed.	ng in al at 1935.	ng in al at	Yearly	Total	ases ed.	ng in
Diseases.	Remaining	Hospital end of 197	Admissions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at	Admis-sions.	Deaths.	Total Cases Treated.	Remaining
Brought forward		76	2,304	163	2,380	80	224	6,318	2,161	6,542	2
III.—Rheumatism, Diseases of Nutrition and of Endocrine Glands, and other General Diseases.—(Contd.)											
61. Beri-beri 62. Pellagra 63. Rickets 64. Osteomalacia	-		21 — 1	9	21		15 —	994	237	1,009	_
65. Diseases of the pituitary gland	-	- -									
(a) Simple goitre	-	 1 	5 4		5 5	1	·	16	3	16 16	-
(d) Tetany	-		2		2			3 -	1 —	3	-
69. Other general diseases IV.—Diseases of the Blood and		-	_								
Blood-Forming Organs.— 70. Hæmorrhagic conditions:— (a) Purpura	-				<u> </u>			1	1	1	
(a) Pernicious anæmia (b) Other anæmias and chlorosis			5	— — 1	7	1		1 -	1 - 17	1	-
(2) Others			4	1	4 —	1		388	17·	390	
Carried forward		79	$\frac{-}{2,357}$	174	2,436	83	241	7,729	2,424	7,970	

Appendix E. Appendix F.

	G	OVERNM	ENT H	OSPITAI	Ls.	-	CHINES	se Hos	PITALS.	
Diseases.	Remaining in Hospital at end of 1954.	Admis-sions.	Deaths.		Remaining in Hospital at end of 1935.	Remaining in Hospital at end of 1954.	Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.
Brought forward	79	2,357	174	2,436	83	241	7,729	2,424	7,970	269
.—Diseases of the Blood and Blood-Forming Organs. (Contd.)										
Multiple myeloma (b) Aleukæmia (Lym-					_				_	
phadenoma) Diseases of the spleen:—	-			<u> </u>	_	_			—	_
(a) Banti's disease (b) Other diseases of	_				_	_				
spleen					_	1	26	1	27	
and blood-forming organs	_				_	-			_	_
V.—Chronic Poisoning.										
Alcoholism (acute or chronic)	_	16	_	16			6		6	
Chronic poisoning by other organic substances	-									_
Opium habit	<u> </u>	45		45	2	12 —	468	1	480	
BarbituratesOthers	_		_	_	_		_			
Chronic poisoning by mineral substances:—		-1								
(a) Occupational 1 e a d poisoning	_					•—	_		_	_
(b) Other chronic poisoning by mineral sub-										
stances Encephalitis :—	_			_		 	7	_		
(a) Cerebral abscess (b) Others	_	5	4	5	_		15	_	15	
Meningitis (does not include C.S.M.)	_	3	3	3	_	13	9	8	22	
Tabes dorsalis (locomotor ataxy)	3	3	_	6	_	1	16	4	17	1
Other diseases of the spinal cord:—										
(a) Progressive muscular atrophy	_	_	_	_		_	_		-	_
Carried forward	82	2,429	181	2,511	85	268	8,269	2,438	8,537	270

Appendix E.

	GOVERNMENT HOSPITALS.						Ì		CHINES	E Hos	PITALS.	
Díseases.	Remaining in	Hospital at end of 1934.	Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1955.	Remaining in	Hospital at end of 1934.	Admis-sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at
Brought forward		82	2,429	181	2,511	85		268	8,269	2,438	8,537	27
V.—Chronic Poisoning. —(Contd.)												
(b) Subacute combined sclerosis					gasilisepina			-			_	
origin	П		3		3	1			84	78	9	
plexy, etc.:— (a) Cerebral hæmorrhage (b) Cerebral embolism and thrombosia			6	6	6			. 7	231	132	238	
(c) Hemiplegia and other paralyses of unstated origin	,	2	7		9	. 1		11	158	9	169	3
83. General paralysis of the insane			64 247		6 79 272	7 36	A CONTRACT OF STREET, ST.		6 2 92		6 . 2 . 96	_
85. Epilepsy			9	1 —	9	_		1	116	59	117	
vous system :— (a) Chorea (b) Neuritis, Neuralgia. (c) Paralysis agitans			22 2		25 2			120	1,896 6		2,016 6	10
(d) Disseminated scle rosis		· -	2 5 3		5 3	1	. 60	2	13 11 16		13 13 16	
(g) Others		2 2	6 2 54	_	8 -4 54	-		$ \begin{array}{c} 21 \\ 6 \\ - \\ 21 \end{array} $	8	-	337 110 8 463	}
Carried forward		131	2,871	195	3,002	2 149	2	462	11,80	2,964	12,26	55 4

Appendix E.

	G	OVERNM	IENT H	OSPITAI	LS.	CHINESE HOSPITALS.					
Diseases.	Remaining in Hospital at end of 1954.	Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at end of 1934.	Yearly suois.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	
Brought forward	131	2,871	195	3,002	142	462	11,803	2,964	12,265	420	
V.—Chronic Poisoning. —(Contd.) Diseases of the ear and or the mastoid sinus:—											
(a) Otitis externa (b) Otitis media (c) Mastoiditis (d) Others		4 5 36	1 1	 6 8 36	1 1		12 3 2 5	1 1 -	12 3 2 5		
VII.—Diseases of the Circulatory System.											
Pericarditis		1		1			9	1	9		
ditis		6	4	6		1 —	131	1	132	2	
vular disease:— (a) Aortic valve disease. (b) Mitral valve disease. (c) Aortic and mitral	2 6	7 18	5 8	$\begin{array}{c} 9 \\ 24 \end{array}$	1 5	5 7	26 253	$\begin{array}{c} 12 \\ 92 \end{array}$	31 260	1 5	
valve disease	_						94	23	94	_	
chronic		3	1	3	_	_	51	20	51		
dium:— (a) Acute myocarditis (b) Myocardial degeneration	_		6	17	1	1 2	127 252	24 194	128 254	5	
Diseases of the coronary arteries:— Angina pectoris			_			-				_	
Carried forward	144	2,968	221	3,112	150	478	12,771	3,362	13,249	436	

Appendix E.

	~		TT				-	C	TToo		
	Go	VERNM	LENT HO	DSPITAL	S			CHINES	se Hos	PITALS.	
Diseases.	ing in tal at 1934.	Yearly	Total.	Cases ated.	ing in all at 1935.	ing in		Yearly	Total.		ing in al at
Discussos	Remaining ir Hospital at end of 1934.	Admis- sions.	Deaths.	Total Case Treated	Remaining in Hospital at end of 1935.	Remaining in	Hospital end of 193	Admissions.	Deaths.	Total Cases Treated.	Remaining Hospital a
Brought forward	144	2,968	221	3,112	150	4	478	12,771	3,362	13,249	48
VII.—Diseases of the Circulatory System.—(Contd.)										-	
95. Other diseases of the heart:— (a) Disordered action of								22	7		
heart		5	-	5			1	9	1	33	
96. Aneurysm 97. Arterio-sclerosis 98. Gangrene		7 3 11	1 1	7 3 11				41 — 19	6 - 5	19	
99. Other diseases of the arteries		_			_						-
(a) Varicose veins (b) Hæmorrhoids (c) Phlebitis	5	$\begin{array}{c c} 1\\ 32\\ 4 \end{array}$		1 37 4	1 1		_ _2 _	7 151 1		7 153 1	-
(d) Thrombosis		5	_	5	_		_		_	_	-
101. Diseases of the lymphatic system (lymphangitis, etc.)	. —	15		15				21	2	21	-
102. Abnormalities of blood pressure	_	3	_	3	1		_			_	-
Arterial hypotension 103. Other diseases of the circulatory system	_	6	_	6	_	The state of the s	DESCRIPTION OF THE PERSON OF T	_	-	_	-
104. Diseases of the nasal fossæ and annexa:— (a) Diseases of the nose		7	_	7	_		_	14	-	14	
(b) Diseases of the accessory nasal sinuses 105. Diseases of the larynx:—		15	_	16	2		-	18	_	18	-
(a) Laryngismus stridu- lus(b) Laryngitis		13	_	13				85	4	85	-
(c) Other diseases of the larynx		-	-	_				_		-	
Carried forward	. 150	3,095	223	3,245	157		481	13,170	0 3,387	13,651	1 4

Appendix E.

	Go	VERNM	ENT H	OSPITAI	s.			CHINES	E Hos	PITALS.	
	Remaining in Hospital at end of 1954.	Yearly	Total.	ses d.	Remaining in Hospital at end of 1935.	in Si	Hospital at end of 1934.	Yearly	Total.	ses d.	Remaining in Hospital at end of 1935.
Diseases.	Remaining Hospital a end of 195			Total Cases Treated.	nin ital f 19	Remaining	ital 19	,		Total Cases Treated.	nin Ital
100	nai osp d of	Admis-sions.	Deaths.	tal	nai spi d of	nai	ospi l of	Admissions.	Deaths.	tal Pre	nai spi l of
100	Rer HC enc	Adr)ea	Tol	Rer Hc enc	Rer	Hcenc	Adr sio)ea	Tot J	Ren Ho enc
			7						Н		—
Brought forward	150	3,095	223	3,245	157		481	13,170	3 387	13,651	448
2. Sugar years and the same	100	0,000	220	5,210	101		101	10,110	5,501	10,001	410
WII Diseases of the											
VII.—Diseases of the reulatory System.—(Contd.)											
. Bronchitis:—	4	E 1	2	55			23	1 100	401	1 015	0
(a) Acute bronchitis (b) Chronic bronchitis	$\begin{bmatrix} 1 \\ 5 \end{bmatrix}$	$\begin{array}{c} 54 \\ 104 \end{array}$		55 109		ė	17	$1,192 \\ 1,493$	421 401	1,2 1 5 1,510	$\begin{array}{c} 8 \\ 43 \end{array}$
(c) Bronchitis not dis-								_,	101	1,010	
tinguished as acute		20		20				201	4 8 6	×0.4	10
or chronic	$-\frac{1}{2}$	$\begin{array}{c} 20 \\ 243 \end{array}$	97	$\begin{array}{c c} 20 \\ 245 \end{array}$	$\begin{vmatrix} 2\\3 \end{vmatrix}$		23	564 1,646	158 1,135	564 1,669	10
Lobar pneumonia	3	90	17	93	1		1	274	1,155 112	275	20 6
Pneumonia (not otherwise		,							11-	2.0	
defined)	_							150	76	150	2
Pleurisy:—	2	9	2	11	1			11	1	11	
(a) Empyema (b) Other pleurisy	1	6		7			1	35	11	36	2
Congestion and hæmor-						Ш					
rhagic infarct of lung,				-						.,	
etc.:— (a) Hypostatic conves-											
(a) Hypostatic convestion of lungs	1				_					_	
(b) Other diseases in-						П					
cluded under 111		174		178	1	ı	8	371	60	379	10
2. Asthma	4	114						1		1	
1. Other diseases of the						į					
respiratory system :-											
(a) Chronic intestitial						П					
pneumonia, includ- i n g occupational						ı					
disease of the lung.				_			_	10	2	10	_
(b) Other diseases in-											
cluded under 114 (1) Gangrene of the				_		Н	_				
lung	_	_		_	_		_		_	-	- 10
Pulmonary gan-	l.										
grene					-				1	_	
(2) Other diseases included under						ı					
114b	_	1	-	1	-		_				-
Commiss 1 4	168	3,796	341	3,964	165	-/-	554	18,91	7 5.664	19,47	1 549
Carried forward		0,100		,,,,,,,					,,,,,,,	, = ,	

Appendix E.

	GOVERNMENT HOSPITALS. CHINESE HOSPITALS.										
Diseases.	Remaining in Hospital at end of 1934.	Yearly -suois -suois	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at end of 1954.	Admis-sions.	Total.	Total Cases Treated.	Remaining in Hospital at	
Brought forward	168	3,796	341	3,964	165	554	18,917	5,664	19,471	549	
IX.—Diseases of the Digestive System.									· · · · · · · · · · · · · · · · · · ·		
cavity, pharynx, etc.:— (a) Diseases of the teeth and gums (b) Ludwig's angina (c) Diseases of the tonsils	$-rac{1}{2}$	125 2 152	1 1	126 2 154	5 — 3	— — 4	17 2 89		17 2 93	1	
(d) Other diseases included under 115 116. Diseases of the esphagus. 117. Ulcer of the stomach or duodenum:—	_ _	17	1	17	. —	_	58	1	58		
(a) Ulcer of the stomach (b) Ulcer of the duodenum	3 1	10 15	5 4	13 16	4	-	38	13	38		
118. Other diseases of the stomach:— (a) Inflammation of the stomach (b) Other diseases in	_	49		49	4,	18	606	131	624	(
cluded under 118 119. Diarrhœa and enteritis	_	6	_	6		2	491	102	493	(
(under 2 years)	1	168	66	169	1	19	1,403	733	1,422	2ξ	
(a) Colitis	$\begin{bmatrix} -1 \\ -5 \end{bmatrix}$	156 91	$-\frac{3}{2}$	157 — 96	6	13 — 1	666 7, 30	326	679, 7 31	1: -	
(a) Hernia	3	32	1	35	2	7	106	11	113	7	
tion	-	6	3	6	1		2	1	2		
(a) Constipation, Intestinal stasis	1	33		34	-	12 —	213 —		225		
Carried forward	186	4,658	429	4,844	194	630	22,655	6,997	23,285	621	

Appendix E.

		Go	OVERNM	ENT H	OSPITAI	Ls.			CHINES	E Hos	PITALS.	-
Diseases.	Remaining in	Hospital at end of 1934.	Yearly -suois	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at		Yearly -sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.
Brought forward		186	4,658	429	4,844	194	68	30	22,655	6,997	23,285	621
.—Diseases of the Digestive System.—(Contd.)												
(c) Others included under 123 Cirhosis of the liver:— (a) Returned as alco-			28		28	2			215		215	10
holic(b) Not returned as al-						_	-	-	11	8	11	1
other diseases of the liver:		5	7	5	12			4	103	39	107	
(a) Acute yellow at- rophy				***************************************				-			Phonoiste guilli	and the same of th
der 125 Amæbic abscess							-	-				Sampleyer
Hepatitis	П		6		6	was the same of th		3	122	17	125	3
(a) With cholecystitis (b) Without mention of		1	12	1	13	1		4	44	4	48	4
Other diseases of the gall bladder and ducts:—								-				
(a) Cholecystitis without record of biliary calculi			_	-								
(b) Others included under 127			5	1	5		_	-	1		1	
Diseases of the pancreas Peritonitis without stated		Approximate the second	1	1	1		_	-	6		6	
cause			5	2	5			1	18	14	19	
-Non-Venereal Diseases of he Genito-Urinary System and Annexa.				v v v v v v v v v v v v v v v v v v v								
Acute nephritis	and the second	10	8 65	1 9	8 75	3		25 18	374 799	6 422	399 817	15 36
acute or chronic			10		10			-	5-8	-		
Carried forward		202	4,805	449	5,007	200	68	85	24,348	7,507	25,033	690

Appendix E.

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	Go	VERNM	ENT H	OSPITAL		CHINES	se Hos	PITALS.		
Diseases.		Yearly		Total Cases Treated.	temaining in Hospital at end of 1935.	ining in ital at f 1934.	1 1		Total Cases Treated.	ining in
	Remaining Hospital end of 193	Admissions.	Deaths	T'otal Tre	Remaining Hospital a	Remaining Hospital	Admis-sions.	Deaths	Total	Remaining Hosoital a
Brought forward	202	4,805	449	5,007	200	685	24,348	7,507	25,033	6!
X.—Non-Venereal Diseases of the Genito-Urinary System and Annexa.—(Contd.)										
133. Other diseases of the kidney and annexa:—		F7			4				10	
(a) Pyelitis (b) Other diseases included under 133	1	7	2 00, 300	8	1	1	9	4	10	
134. Calculi of the urinary passages:—										
(a) Calculi of kidney and ureter		6	1	6	2	_	-			_
(b) Calculi of the bladder(č) Calculi of unstated	1	20		21		1	44		45	
site	_	8	1	8	_	-	_		*	-
(a) Cystitis		5		5	_		70	8	70	
136. Diseases of the urethra, urinary abscess, etc.:— (a) Stricture of the ure-	,									
(b) Other diseases of		11	2	11	2	. 1		7	58	
the urethra, etc 137. Diseases of the prostate 138. Diseases of the male	—	$\begin{bmatrix} 2 \\ 1 \end{bmatrix}$		1	_	6	31 21	_	37 22	
genito organs :— (a) Phimosis (b) Paraphimosis (c) Hydrocele	1	29 — 17		30 — 18	1	_	22 10 50	=	22 10 50	-
139. Diseases of the female genital organs:— (a) (1) Diseases of the										
ovary(2) Diseases of the		27		28		3		2	10	-
Fallopian tube (3) Diseases of the parametrium		16		18		_	46		46	-
Carried forward	208	4,979	453	5,187	207	698	3 24,71	7,528	25,418	3 7

Appendix E.

		Go	VERNM	ENT H	OSPITAI	s.			CHINES	e Hos	PITALS.	
Diseases.	ng in	tal at 1934.	Yearly	Total.	ases ed.	ng in al at 1935.	ng in	al at 934.	Yearly	Total.	ases ed.	ng in il at 1935.
Diseases.	Remaining in	Hospital end of 193	Admis-sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining ir	Hospital at end of 1934.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1955.
Brought forward		208	4,979	453	5,187	207		698	24,715	7,528	25,413	706
-Non-Veneral Diseases of the Genito-Urinary System and Annexa.—(Contd.)							N. C.					
(b) Diseases of the uterus		3	218		221	4		2	28	2	30	2
breast			7		7				14		14	
gans			-31		31	nuo-yearish		_	109	4	109	washing.
I.—Diseases of Pregnancy. Childbirth and the Puerperal State.												
Post-abortive sepsis Septic abortion			2		2							
(a) Hæmorrhage following abortion (b) Without record of		 .	58		58	2	-		79		79	www.druibrelia
hæmorrhage		1	10		11				36 13	3	36	1
Other accidents of preg- nancy		1	27		28							
. Puerperal hæmorrhage:— (a) Placenta prævia		+3	17	2	17				23	5	23	
(b) Other puerperal hæmorrhage		ugikaskum	15	1	15				32	6	32	
(a) Puerperal septice- mia and pyæmia (b) Puerperal tetanus Puerperal albuminuria and			3	3	3	_			6	1	`6	
convulsions:— (a) Puerperal convulsions sions			4	2	4	- Consideration			.36	12	36	-
cluded under 146 Other toxemias of preg- nancy	ı		10	1	10	2	-				- manual	
Carried forward		213	5,381	462	5,594	215		700	25,091	7,651	25,79	709

Appendix E.

	G	OVERNI	ENT H	OSPITA	Ls.		CHINE	se Hos	SPITALS.	
Diseases.	ning in tal at 1934.	Yearly	Total.	tal Cases Freated.	ing in tal at 1935.	ing in tal at 1954.	Yearly	Total.		÷ ii.
	Remaining ir Hospital at end of 1934.	Admissions.	Deaths.	Total Cases Treated.	Remaining Hospital a	Remaining Hospital end of 193	Admis-sions.	Deaths.	Total Cases Treated.	Remaining Hounital
Brought forward	213	5,381	462	5,594	215	700	25,091	7,661	25,791	7
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State.—(Contd.)						3				*
148. Puerperal phlegmasia alba dolens, embolism, and sudden death:— (a) Puerperal phlegma-		-	. ~	-		- 6.0				
sia alba dolens not returned as septic (b) Puerperal embolism and sudden death						===	24		24	_
149. Conditions associated with labour:— (a) Normal labour	53	2,936	8	2,989	68	97	7,057		7,154	-
(b) Accidents of child- birth		113	3	113	1	—	149	15	149	
state:— (a) Puerperal insanity. (b) Puerperal diseases of the breast	_	4	_	4	_	_			-	· ·
(c) Not in labour XII.—Diseases of the Skin and Cellular Tissue.		94		94						_
151. Carbuncle, Boil	1	71	- 1	72	4	3	91	16	94	
(a) Cellulitis	7	202 130	_1	202 137	6	38 63	148 962	42 81	186 1,025	£ 7
153. Other diseases of the skin and its annexa	1	125		126	10	4	611	15	615	′ 1
XIII.—Diseases of the Bones and Organs of Locomotion.										1
154: Acute infective osteomyelitis and periostitis 155. Other diseases of the	2	9	2	11	2	_	13	2	. 13	
bones		10		10		_	36	1	36	
Carried forward	277	9,077	478	9,354	310	905	34,182	7,833	35,087	87

Appendix E.

Non-alla P.

		Go	VERNM	ENT H	OSPITAL	S.			CHINES	e Hosi	PITALS.	
Diseases.	Remaining in		Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in	Hospital at end of 1934.	Yearly -sions.	Deaths.	Total Cases Treated.	Kemanning in Hospital at end of 1935.
Brought forward		277	9,077	478	9,354	310		905	34,182	7,833	35,037	870
II.—Diseases of the Bones and Organs of Locomotion. —(Contd.)	, ,											
Diseases of the joints and other organs of locomotion:—												
(a) Diseases of the joints		1	14		15	3		9	146	1	155	3
organs of locomotion		-	17		17			_				_
IV.—Congenital Malforma- tions.												
Congenital malformations: (a) Congenital hydrocephalus		4	2	4	6			1	17		18	
(b) Spina bifida and Meningocele	н		_			_					-	
(c) Congenital malformation of heart (d) Monstrosities		gament				quinterments -		TIT				
(e) Other congenital malformations		4	34	4	38	5			12	1	12	
XV.—Diseases of Early												
Infancy. Congenital debility Premature birth		garaneera	16	4	16			2	273 65	230 46	275 65	3 1
Injury at birth	. 1	. 1	11	5	12							
early infancy:— (a) Atelectasis			3			3		alprojective)	2 7	2	2 7	
(b) Icterus neonatorum (c) Other diseases in cluded under 161	-	aproximately .									-	-
(1) Diseases of the umbilicus		ususuman							7		7	
(2) Pemphigus neo natorum	-								-			
(3) Others included under 161(c)		*				2000.00			18		18	
Carried forward		287	9,174	496	9,46	1 318	S	917	34,72	9 8,113	35,64	6 877

Appendix E.

	, G	OVERNN	ENT H	OSPITAI	Ls.	H	CHINE	se Hos	PITALS.	
Diseases.	Remaining in Hospital at end of 1954.	Yearly -sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at end of 1934.	Yearly suois.	Deaths.	Total Cases Treated.	Remaining in
Brought forward	287	9,174	496	9,461	318	917	34,729	8,113	35,646	8
XVI.—Old Age.							400	. 1/		*
162. Old age:— (a) Senile dementia (b) Other forms of	-					7	4	1	11	_
XVII.—Conditions Associated with Violence.		7	6	7		11	409	142	420	
163. Suicide, or attempted suicide, by poisoning					•					
(including corrosive poisoning) 164. Suicide, or attempted	_	82	23	82	_	-	34	4	34	-
suicide, by gas poisoning 165. Suicide, or attempted suicide, by hanging or strangulation		2	_	2		_				-
166. Suicide, or attempted suicide, by drowning 167. Suicide, or attempted	-	66	2	66		_	4	_	4	-
suicide, by firearms 168. Suicide, or attempted suicide, by cutting or	_				_	_		_	_	-
piercing instruments 169. Suicide, or attempted suicide, by jumping from		5	1	5	1		1		1	-
a height	_		_		_	_ _	_	_	_	-
171. Suicide, or attempted suicide, by other means. 172. Infanticide	ļ	2		2	_	_			-	-
173. Assault or homicide, by firearms		2	1	2	1	_				-
174. Assault or homicide, by cutting or piercing instruments	_	594	_	594	9		-		_	-
other means Carried forward	287	9,934	529	10,221	329	935	35,181	8,260	36,116	8

Appendix E.

	Go	OVERNM	ENT H	OSPITAI	s.		CHINES	e Hos	PITALS.	
Diseases.	Remaining in Hospital at end of 1934.	Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at end of 1954.	Yearly suois suois	Deaths.	Total Cases Treated.	Kemaining in Hospital at end of 1935.
Brought forward	287	9,934	529	10,221	329	935	35,181	8,260	36,116	899
II.—Conditions Associated with Violence.—(Contd.)						,				
Attacks by venomous animals:— (a) Snake bite		3	_	3	1		3	_		
(c) Others	_	22		22					_	_
gas Other acute accidental		6		6			1/2 - All Parallel			
poisoning	_	6	4	6						
(conflagration excepted) (a) Burns by fire (b) Scalds	1. 1	24 33	2 3	25 34	2 2	5 1	18 27		23 28	1
(c) Burns by corrosive substances	_				_	_	<u> </u>			_
(e) Dermatitis due to exposure to other forms of radiation						_				
Accidental mechanical suf- focation		_				_	1		1	
drowning Accidental injury by fire-		9		9			2		2	
Accidental injury by cut- ting or piercing instru-		70		70	5	12	46		58	2
ments		10		70		12	20			
falling, on railways, by vehicles, by machinery, by landslides, etc.)	38	1,523	115	1,561	39	7	410	11	417	14
Carried forward	007	11,631	653	11,95	8 378	960	35,688	8,273	36,648	916

Appendix E.

	G	OVERNM	IENT H	OSPITAI	S.	1	CHINE	se Hos	рттате	
Diseases.	Remaining in Hospital at end of 1954.	Yearly	Total.	<u>δ</u>	Remaining in Hospital at end of 1935.	Remaining in Hospital at end of 1934.	Yearly	Total.	Si	Remaining in Hospital at
	Ren Ho end	Admis-sions.	Deaths	Tot	Rem Ho end	Rem Hog end	Admis- sions.	Deaths	Tota	Rem
Brought forward	327	11,631	653	11,958	378	960	35,688	8,273	36,648	91
XVII,—Conditions Associated with Violence.—(Contd.)							1,= 1	· ·	•	
187. Cataclysm (This title in- cludes all deaths from cyclones, volcanic erup- tions, tidal waves, earth- quakes or tornadæs)	p.co.		·			,				
188. Injury by animals (poisoning by venomous animals excepted)	. —	15-		15	1	— .				
189. Hunger or thirst 190. Excessive cold 191. Excessive heat 192. Lightning 193. Electricity		$\begin{bmatrix} - \\ 2 \\ - \\ 2 \end{bmatrix}$		2 2			42		42	
194. Other and unstated forms —of accidental violence:— (a) Inattention at birth	_			,		<u> </u>			; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	
(b) Other causes included under 194						20	454	2	474	20
all deaths from violence returned as "open verdict")			-			— ,		·		
Found drowned			Company of the Company			— ; — ; — ;	<u> </u>	-	. —	·
197. Execution of civilians by belligerent armies								<u>.</u>	. —	
XVIII.—Ill-Defined Diseases.								:		
199. Sudden death	GEORGIANTO I						39	-	39	
Carried forward	$\widetilde{327}$	11,650	653	11,977	379	980.	36,223	8,275	37,203	930

Appendix E.

	G	OVERNM	ENT H	OSPITAI	Ls.		CHINE	se Hos	PITALS.	
Diseases.	ing in tal at 1934.	Yearly	Total.	Cases sted.	ung in tal at 1935.	tal at 1934.		Total.	Cases ted.	tal at 1935.
	Remaining Hospital a end of 193	Admis-sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.	Remaining in Hospital at end of 1954.	Admissions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1935.
Brought forward	327	11,650	653	11,977	379	980	36,223	8,275	37,203	936
III.—Ill-Defined Diseases. —(Contd.)				1						
Cause of death unstated or ill-defined:— (a) Heart failure:										
Cardiac asthenia Cardiac exhaustion.	_		_	·		_				Sample of Sample
Cardiac failure Cardiac paralysis Heart failure										
Myocardial failure Paralysis cordis Weak heart						_				
(b) Other ill-defined causes	-	13		13		_				
Collapse Found dead (no evidence of cause	_				_	_	_			
of death) Operation	_		_			_	_			
Post operative shock Surgical shock Unknown					_		_	_		
Under observations Malingering Persons accompanying pat-	-	449		453	_	207	120		207	
ients		7	- 650	7	970	1 107	26.249	- 2 975	27 520	936
Total	33.1	12,119	653	12,450	379	1,187	50,345	8,275	37,530	956

APPENDIX G.

Mortuaries—Return of Diseases for the year 1935.

*Diseases.	Male.	Female.
I.—Infectious and Parasitic Diseases.		
1. Typhoid fever	3	1
2. Paratyphoid fevers	_	_
3. Typhus fever		<u> </u>
5. Undulant fever		
6. Small-pox:—		
(a) Variola major	21	22
(b) Variola minor Alastrim 7. Measles	— 1	
8. Scarlet fever		
9. Whooping cough	_	
10. Diphtheria	7	4
11. Influenza		— ·
13. Dysentery:—		10.
(a) Amebic	. 1	
(b) Bacillary(c) Other or unspecified	3	1
14. Plague:—	· -	
(a) Bubonic		
(b) Pneumonic		
(c) Septicæmic	-	
16. Acute poliomyelitis	-	. — .
17. Encephalitis lethargica		
18. Cerebro-spinal fever 19. Glanders	5 .	4
20. Anthrax	* - 4	_
21. Rabies		-
22. Tetanus		
23. Tuberculosis of the respiratory system 24. Tuberculosis of the central nervous	195	202
system	36	28
25. Tuberculosis of Intestines and peri-		
toneum	25	19
20. Tuberculosis of vertebral column	3	3
Carried forward	3.00	285

^{*} From the International list of causes of death.

MORTUARIES—RETURN OF DISEASES FOR THE YEAR 1935.

Diseases.	Male.	Female.
Brought forward	300	285
I.—Infectious and Parasitic Diseases.—(Contd.)		
27. Tuberculosis of other bones and joints28. Tuberculosis of skin and subcutaneous tissues		
29. Tuberculosis of the Lymphatic system 30. Tuberculosis of Genito-urinary system.		
31. Tuberculosis of other organs 32. Disseminated tuberculosis 33. Leprosy	9	11
34. Syphillis:— (a) Congenital (b) Primary	3	1
(c) Secondary	10	3
(a) Gonorrhœal ophthalmia (b) Gonorrhœa		
36. Purulent infection:— (a) Septicæmia (b) Pyæmia		1
(c) Gas gangrene	_	_
(a) Benign Tertian	.11	
(d) Cachexia	. —	
Kala azar Trypanosomiasis Yaws	_	
40. Anklostomiasis 41. Hydatid cysts		- V
Carried forward	339	303

MORTUARIES—RETURN OF DISEASES FOR THE YEAR 1935.

Diseases.	Male.	Female.
Brought forward	-339	303
I.—Infectious and Parasitic Diseases.—(Contd.)		
42. Other diseases due to helminths:— Ascariasis Filariasis	2 -	TE
Tæniasis	<u>in</u> i	(0= 0. <u>)</u>
43. Mycoses:— (a) Actinomycosis	a 16 1 a	1 1
(b) Other mycoses Sprue		20 1 1 1 2 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(b) Other sequelæ of vaccination. (c) German measles		
(d) Varicella	, L T	and to the
(g) Glandular fever		,
1I.—Cancer and other Tumours. 45. Cancer or other malignant diseases of	} }	J
the buccal cavity, and pharynx 46. Cancer or other malignant tumours of the digestive organs and peri-) ·
toneum:— (a) Oesophagus	I	1 (6 - 100
(b) Stomach and duodenum (c) Rectum		
(e) Other digestive organs		10000
the respiratory organs		1
49. Cancer or other malignant tumours of other female genital organs	1	· A ·
Carried forward	341	305

Diseases.	Male.	Female.
Brought forward	341	305
II.—Cancer and other Tumours.—(Contd.)	•	in the later
 50. Cancer or other malignant tumours of the breast 51. Cancer or other malignant tumours of the male genito urinary organs 52. Cancer or other malignant tumours of the skin 53. Cancer or other malignant tumours of organs not specified 54. Non-malignant tumours:— (a) Female genital organs 		1
(b) Other sites		
III.—Rheumatism, Diseases or Nutrition and of Endocrine Glands, and other General Diseases.		~ ·
56. Rheumatic fever 57. Chronic rheumatism, Osteoarthritis:— (a) Chronic rheumatism (b) Rheumatoid arthritis, Osteoarthritis		
58. Gout 59. Diabetes mellitus 60. Scurvy:— (a) Infantile scurvy	1	
(b) Scurvy 61. Beri-beri 62. Pellagra 63. Rickets 64. Osteomalacia 65. Diseases of the pituitary gland	60	10
Carried forward	402	316

Diseases.	Male.	Female.
Brought forward	402	316
III.—Rheumatism, Diseases or Nutrition and of Endocrine Glands, and other General Diseases.—(Contd.)		111
66. Diseases of the thyroid and parathyroid glands (a) Simple goitre (b) Exophthalmic goitre (c) Myyandama Cratiniam		
(c) Myxœdema, Cretinism		10
68. Diseases of the adrenal glands (excluding tuberculosis) 69. Other general diseases		—.
IV.—Diseases of the Blood and Blood-Forming Organs.		,
70. Hæmorrhagic conditions:— (a) Purpura (b) Hæmophilia	1	(0. Bas
71. Anæmia, Chlorosis:— (a) Pernicious anæmia (b) Other anæmias and chlorosis.	Terror Toler	.1
(1) Splenic anæmia	m=	
Chronic myeloid Chronic lymphatic Acute		12.00
Multiple myeloma		=
(b) Other diseases of spleen 74. Other diseases of the blood and blood- forming organs	_	
Carried forward	403	317

Diseases.	Male.	Female.
Brought forward	403	317
V.—Chronic Poisoning.		1
75. Alcoholism (acute or chronic)		- 30
Morphine habit Barbiturates Others 77. Chronic poisoning by mineral sub-		
stances:— (a) Occupational lead poisoning (b) Other chronic poisoning by		_
mineral substances 78. Encephalitis:— (a) Cerebral abscess (b) Others		
79. Meningitis (does not include C.S.M.) 80. Tabes dorsalis (locmotor ataxy) 81. Other diseases of the spinal cord:—	2	_ 2
 (a) Progressive muscular atrophy. (b) Subacute combined sclerosis. (c) Myelitis of unstated origin (d) Other diseases included under 81 		
82. Cerebral hæmorrhage, Apoplexy, etc.:- (a) Cerebral hæmorrhage (b) Cerebral embolism and throm-	1	1 3
bosia		_
83. General paralysis of the insane		
(b) Others 85. Epilepsy 86. Infantile convulsions (age under 5)		4 7
years)		
Carried forward	320	406

Diseases.	Male.	Female.
Brought forward	406	320
V.—Chronic Poisoning.—(Contd.)		
87. Other diseases of the nervous system: (a) Chorea (b) Neuritis, Neuralgia (c) Paralysis agitans (d) Disseminated sclerosis (e) Hysteria (f) Neurasthenia (g) Others 88. Diseases of the eye:— (a) Conjunctivitis (b) Trachoma (c) Corneal ulcer (d) Other diseases 89. Diseases of the ear and or the mastoid sinus:—		
(a) Otitis externa (b) Otitis media (c) Mastoiditis (d) Others		
VII.—Diseases of the Circulatory System.	•	
90. Pericarditis 91. Acute endocarditis:— (a) Malignant endocarditis (b) Other acute endocarditis 92. Chronic endocarditis, valvular disease: (a) Aortic valve disease (b) Mitral valve disease (c) Aortic and mitral valve disease (d) Endocarditis not returned as acute or chronic	5 — 6 — —	3
(e) Other or unspecified valve disease	- 1 30	$-\frac{2}{6}$
Carried forward	448	331

	Diseases.	Male.	Female.
	Brought forward		331
VII.—Dise	ases of the Circulatory System. —(Contd.)		, then
94. Diseas	se of the coronary ateries:—		
Ar	ngina pectoris	, . - : : : - :	
	diseases of the heart:		
	Disordered action of heart	1 1	. 20
(0)	Other diseases included under 95	/,	in the second
96. Aneur	ysm		!! /
97. Arterio	o-sclerosis	$^{\circ}$ 15 $_{\odot}$	
98. Gangr	ene		
99. Other	diseases of the arteries	4	1
100. Diseas	ses of the veins:—	- 1	
(a)	Varicose veins	 1.	_
(0,	Hæmorrhoids Phlebitis		
	Thrombosis	 ,	4
	Others	- 1	. Para gray
101. Diseas	ses of the lymphatic system		·
(lym	phangitis, etc.)		
102. Abnor	malities of blood pressure:—	10.	
Ar	terial hypertension		
AI	remai hypotension		
105. Other	diseases of the circulatory		
104. Diseas	ses of the nasal fossæ and		
	exa:	–	
	Diseases of the nose	· · · · ·	
(b)) Diseases of the accessory		ধ্য কল
	nasal sinuses		
	ses of the larynx:—		
	Laryngismus stridulus		
) Laryngitis of the larger	_	_
106. Bronc	Other diseases of the larynx	. 4	
	Acute bronchitis	121	152
(b)	Chronic bronchitis	2	1
	Bronchitis not distinguished		
	as acute or chronic	16	6
·	Carried forward	606	491

Mortuaries—Return of Diseases for the year 1935.

Diseases.	Male.	Female.
Brought forward	606	491
VII.—Diseases of the Circulatory System. —(Contd.)		
 107. Broncho-pneumonia 108. Lobar pneumonia 109. Pneumonia (not otherwise defined) 110. Pleurisy:— (a) Empyema (b) Other pleurisy 111. Congestion and hæmorrhagic infarct 	1,183 117 27 15	1,287 64 19 10
of lung, etc.:— (a) Hypostatic convestion of lungs (b) Other diseases included under 111	3	1
112. Asthma 113. Pulmonary emphysema 114. Other diseases of the respiratory system:— (a) Chronic intestitial pneumonia, including occupational disease of the lung (b) Other diseases included under 114 (1) Gangrene of the lung Pulmonary gangrene (2) Other diseases included under 114b.	_ _ _ 1 _ _	
IX.—Diseases of the Digestive System. 115. Diseases of the buccal cavity, pharynx, etc.:— (a) Diseases of the teeth and gums (b) Ludwig's angina (c) Diseases of the tonsils (d) Other diseases included under 115 116. Diseases of the æsphagus		
Carried forward	1,952	1,872

		4
Diseases.	Male.	Female.
Brought forward	1,952	1 070
Brought forward IX.—Diseases of the Digestive System.	1,004	1,872
1A.—Diseases of the Digestive System.	-	
—(Contd.)		
117. Ulcer of the stomach or duodenum:		
(a) Ulcer of the stomach	4	
118. Other diseases of the stomach:	*****	******
(a) Inflammation of the stomach		5
(b) Other diseases included under		ing
118		
119. Diarrhœa and enteritis (under 2 years)	287	-249
120. Diarrhœa and enteritis:		976.
(2 years and over) (a) Colitis	, - ·;	in the first of the second
(b) Otherwise defined	5	· · · · · · · · · · · · · · · · · · ·
121. Appendicitis	2	
122. Hernia, Intestinal obstruction:	, , , , , ,	50% Res
(a) Hernia		
(a) Hernia (b) Intestinal obstruction	2	2
123. Other diseases of the intestines:	•	211
(a) Constipation, Intestinal stasis	· · · · · · · · · · · · · · · · · · ·	
(b) Diverticulitis		
(c) Others included under 123 124. Cirrhosis of the liver:	• • • • • • • • • • • • • • • • • • • •	* * * *
(a) Returned as alcoholic	· Ω / τ	*
(b) Not returned as alcoholic	<u></u>	
125. Other diseases of the liver:		
(a) Acute yellow atrophy	- <u> </u>	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
,		
Amæbic abscess	1	
Hepatitis		
(a) With cholecystitis		
(b) Without mention of cholecy-		O'Minute.
stitis		-
127. Other diseases of the gall bladder		TAR.
and ducts:		
(a) Cholecystitis without record		
of biliary calculi	-	
(b) Others included under 127		to managem
The Comment of the Co	Y: 0 0 0 0	0.10
Carried forward	2,258	2,134
		e ne almi

Diseases.	Male.	Female.
Brought forward	2,258	2,134
IX.—Diseases of the Digestive System. —(Contd.)		
128. Diseases of the pancreas	- : 4	5
X.—Non-Venereal Diseases of the Genito-Urinary System and Annexa.		
130. Acute nephritis	_	1
chronic 133. Other diseases of the kidney and annexa:— (a) Pyelitis (b) Other diseases included under	7	3
133	_	
(b) Calculi of the bladder		
(b) Other diseases of the bladder 136. Diseases of the urethra, urinary abscess, etc.:— (a) Stricture of the urethra		
(b) Other diseases of the urethra, etc		
138. Diseases of the male genito organs:— (a) Phimosis		— —
Carried forward	2,269	2,143

Mortuaries—Return of Diseases for the year 1935.

Diseases.	Male.	Female.
Brought forward	2,269	2,143
X.—Non-Veneral Diseases of the Genito-Urinary System and Annexa. —(Contd.)		
139. Diseases of the female genital organs:—		-
(a) (1) Diseases of the ovary (2) Diseases of the Fallopian tube		
(3) Diseases of the parametrium		
(b) Diseases of the uterus		·
XI.—Diseases of Pregnancy, Childbirth		h —
and the Puerperal State. 140. Post-abortive sepsis Septic abortion	-	· ¬ \ ()
141. Abortion not returned as septic:— (a) Hæmorrhage following abor-		·
tion (b) Without record of hæmorrhage 142. Ectopic gestation		
143. Other accidents of pregnancy	'	<u> </u>
(b) Other puerperal hæmorrhage 145. Puerperal sepsis:—		. 1
(a) Puerperal septicæmia and pyæmia		
146. Puerperal albuminuria and convulsions:—	:	
(a) Puerperal convulsions		
147. Other toxemias of pregnancy		
Carried forward	2,269	2,145

Diseases.	Male.	Female.
Brought forward	2,269	2,145
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State.—(Contd.)		
148. Puerperal phlegmasia alba dolens, embolism, and sudden death:— (a) Puerperal phlegmasia alba dolens not returned as septic (b) Puerperal embolism and sudden death		
149. Conditions associated with labour:— (a) Normal labour (b) Accidents of childbirth		
150. Other or unspecified conditions of the puerperal state:— (a) Puerperal insanity		
XII.—Diseases of the Skin and Cellular Tissue.		
151. Carbuncle, Boil		
XIII.—Diseases of the Bones and Organs		1.
of Locomotion. 154. Acute infective osteomyelitis and periostitis		
(a) Diseases of the joints		
Carried forward	2,269	2,148

— M 221 —

Mortuaries—Return of Diseases for the year 1935.

Diseases.	Male.	Female.
Brought forward XIV.—Congenital Malformations.	2,269	2,148
157. Congenitala malformations:— (a) Congenital hydrocephalus (b) Spina bifida and Meningocele (c) Congenital malformation of heart (d) Monstrosities (e) Other congenital malformations	——————————————————————————————————————	1 — —
XV.—Diseases of Early Infancy. 158. Congenital debility 159. Premature birth 160. Injury at birth 161. Other diseases peculiar to early	51 28 —	49 25 —
infancy:— (a) Atelectasis (b) Icterus neonatorum (c) Other diseases included under	26 11	$\frac{22}{4}$
161 (1) Diseases of the umbilicus (2) Pemphigus neonatorum (3) Others included under 161 (c)		
XVI.—Old Age.		
162. Old age:— (a) Senile dementia (b) Other forms of senile decay		1
XVII.—Conditions Associated with Violence. 163. Suicide, or attempted suicide, by poisoning (including corrosive poisoning)	8	6
164. Suicide, or attempted suicide, by gas poisoning		
Carried forward	2,393	2,256

Diseases.	Male.	Female.
Brought forward	2,393	2,256
XVII.—Conditions Associated with Violence.—(Contd.)		VXX
165. Suicide, or attempted suicide, by hanging or strangulation	12^{j}	11
166. Suicide, or attempted suicide, by drowning	3	7
167. Suicide, or attempted suicide, by firearms	6	v
168. Suicide, or attempted suicide, by cutting or piercing instruments	3	. 1
169. Suicide, or attempted suicide, by jumping from a height	5	·
170. Suicide, or attempted suicide, by crushing	<u></u>	
171. Suicide, or attempted suicide, by other means	_	- 131
172. Infanticide	<u> </u>	, T
174. Assault or homicide, by cutting or piercing instruments	. 2	$\frac{2}{2}$
175. Assault or homicide, by other means 176. Attacks by venomous animals:— (a) Snake bite	. 1	ain.
(b) Insect bite (c) Others		
177. Food poisoning		2
or poisonous gas		
180. Injuries due to conflagration	 .	
(conflagration excepted) (a) Burns by fire		1
(b) Scalds (c) Burns by corrosive substances	1	_
(d) Dermatitis due to exposure to sun		110-
(c) Dermatitis due to exposure to other forms of radiation	-	
552.6 Carried forward	2,427	2,282

— M 22! —

Mortuaries—Return of Diseases for the year 1935.

Diseases.	Male.	Female.
XVII.—Conditions Associated with Violence.—(Contd.)	2 ,427	2,282
182. Accidental mechanical suffocation 183. Accidental immersion or drowning 184. Accidental injury by firearms 185. Accidental injury by cutting or pier-	$\begin{array}{c}1\\45\\1\end{array}$	
cing instruments 186. Accidental injury by fall, crushing, etc. (This title includes all accidental deaths from injuries by	' 3	
falling, on railways, by vehicles, by machinery, by landslides, etc.) 187. Cataclysm (This title includes all deaths from cyclones, volcanic eruptions, tidal waves, earthquakes	67	15
or tornadæs)	. —	
190. Excessive cold 191. Excessive heat 192. Lightning 193. Electricity 194. Other and unstated forms of ac-		
cidental violence:— (a) Inattention at birth (b) Other causes included 194 195. Violence of an unstated nature (i.e. accidental, suicidal, etc.) (Includes		
all deaths from violence returned as "open verdict")	1	
Found drowned Injury (open verdict) 196. Wounds of war 197. Execution of civilians by belligerent armies 198. Execution		
Carried forward	2,549	2,318

— M 224 —

Diseases.	Male.	Female.
XVIII.—Ill-Defined Diseases.	2,549	2,318
199. Sudden death	2	
Cardiac exhaustion Cardiac failure Cardiac paralysis Heart failure Myocardial failure		
Paralysis cordis Weak heart (b) Other ill-defined causes (c) Cause not specified:— Collapse Found dead (no evidence of		1
cause of death) Operation Post-operative shock Surgical shock Unknown		— · — ·
201. Under observations 202. Malingering 203.—Persons accompanying patients 204. Still Births 205. Decomposed	102 121	91 54
Total	2,776	2,464

Appendix H.

REPORT OF THE REGISTRAR GENERAL OF BIRTHS AND DEATHS.

The Births and Deaths Registration Ordinance of 1934 by simplifying procedure and reducing fees brought about a considerable increase in the numbers of births and deaths registered at the various centres.

Births.

Although registration is becoming more and more complete a number of births still escape registration, and this is particularly the case with females.

25,037 births were registered during 1935 (20,886 in 1934). The following tables show the numbers registered by the various registries:—

	Births registered.					
Hong Kong Registries.	Male		Female		Total	
	1934	1935	1934	1935	1934	1935
The General Register Office Central C.P.D. Western C.P.D. Eastern C.P.D. Aberdeen C.P.D. Shaukiwan C.P.D. Stanley Police Station	1,609 580 911 1,597 217 290 4	2,598 1,269 415 1,739 216 340 10	1,184 459 802 1,464 178 296 2	2,118 1,168 408 1,567 183 304	2,793 1,039 1,713 3,061 395 586 6	4,716 2,437 823 3,306 399 644 11
Total	5,208	6,537	4,385	5,749	9,593	12,336

	Births registered.				d.		
Kowloon Registries.		Male		Female .		Total	
	1934	1935	1934	1935	1934	1935	
Yaumati C.P.D. Hunghon C.P.D. Kowloon City C.P.D. Shamshuipo C.P.D.	3,122 80 382 600	3,380 237 533 724	2,658 72 337 478	2,970 156 396 495	5,780 152 719 1,078	6,350 393 929 1,219	
Total	4,184	4,874	3,545	4,017	7,729	8,891	

New Territories Registries.	1931 Census	Births registered.			
	Population.	1932	1933	1934	1935
		<u> </u>			
(N.T.—North)					
Shatin	4,346	3	194	137	175
Taipo	12,684	84	466	437	503
Shataukok	8,941	11	244	321	315
Sheung Shui	10 208	13	371	325	382
Lok Ma Chau	4,377		121	144	156
Autau	12,887	151	526	515	530
Ping Shan	12 660		313	449	454
Sai Kung	7,585		270	260	349
(N.T.—South)					
Tsun Wan	5,355	53	164	234	258
Cheung Chau	5,477	226	538	560	526
Tai-O, (Lantau Island)	7,409	46	173	182	162
	,				
			*		
Total	91,929	587	3,380	3,564	3,810

Non-Chinese births for 1935.

There were 527 births (273 male, 254 female) (including 18 late registration of births after 12 months) registered as follows:—

	British	229	(14)
	Australian	4	
	New Zealander	2	
	American	13	
	French	4	
	German	11	
	Netherland	4	
	Norwegian	5	
	Danish	1	
	Swiss	1	
	Hungarian	1	
) l -	Panamanian	2	
	Russian	2	
	Pertuguese	65	(1)
	Jewish	1	, ,
	Japanese	19	
	Indian	117	(2)
	Malayan	9	
	Ceylonese	2	
	Filipino	17	
	Siamese	1	`
	Brazilian	3	
	Annamite	4	
	Eurasian	10	(1)
			()
	Total	527	

^{() =} Figures for late registration after 12 months.

Vaccination of Infants,

Under the Vaccination Ordinance the guardians of every child born must, unless there be a medical reason to the contrary, furnish to the Registrar General of Births and Deaths a certificate of vaccination, on receipt of which the Registrar General must record the facts in the Births Register. Notices containing advice on this matter are handed to the person registering the birth, and if the person notifying be not the parent notice is also sent by post.

If the necessary certificates are not received reminders are sent by post to the parents.

The non-Chinese make a good response and the majority of infants are vaccinated. The Chinese on the contrary do not make a good response and the majority of infants remain unvaccinated or at any uncertified. The majority of the Chinese are of course working class people who can neither read nor write English or Chinese.

Many of these people hold the belief that a child should not be vaccinated until it has experienced two Chinese New Years, which means that one born just after the New Year would be nearly two years old before the propitious time arrives.

Under the circumstances very few prosecutions are instituted for neglect to certify as to successful vaccination.

The table overleaf shows the position in detail:—

VACCINATION RETURN FOR REGISTERED CHILDREN OF 1935.

Total.	602 4,285 1,993 2,667 1,071	1,741,480
IstoT Carried forward.	2,696 1,002 1,221 1,221 380 2,387 2,387	471 79 8,695
.dhaU	28	85
.elditqeseveal	21 14 1 1 1	53
Had Small- .xoq		
Oannot be bauot	378 651 145 145 331 1,210 146	3,589
Left. Colony.	453 587 183 74 74	1,392
Dead.	293 293 1 0 68 21 21	33
Vaccinated.	437 1,645 1,752 1,773 4,620 4,620 684 1,53	13,424
TetoT eldsid.	602 4,285 1,993 2,667 759 8,387 1,071	480
New Birtha.	4,193 3,306 3,306 2,437 6,350 929 929	399
Brought forward Unvaccinated.	1,032 1,032 1,161 230 2,037 142 142	81
1935	General Registry (Non-Chinese) General Registry (Chinese) Western C.P.D. Western C.P.D. Central C.P.D. Shaukiwan C.P.D. Yaumati C.P.D. Hunghom C.P.D. Kowloon City C.P.D.	Aberdeen C.P.D. Total

C.P.D. = Chinese Public Dispensary.

Deaths.

Before registering a death the Deputy Registrar or Assistant Registrar must be satisfied that the cause of death given is the true cause and in case of doubt it is his duty to institute or cause to be instituted immediate enquiries with a view to ascertaining the true cause of death.

The authorities certifying the cause of death are: -

- (a) the medical practitioners in attendance during the last illness whether in hospital practice, dispensary practice, or private practice.
- (b) the Medical Superintendents of the Tung Wah, Tung Wah Eastern and Kwong Wah Hospitals for bodies where there has been no registered medical practitioner attending.
- (c) the Health Officer, Urban Council, for bodies found in houses and for which he is called for diagnosis.
- (d) the Coroner for all bodies examined at the Public Mortuaries—including medico legal cases and bodies dumped in the street or left at convents for disposal.

There were 22,159 deaths registered during 1935, 19,766 in 1934), and the following table shows the number certified during 1935 by the various authorities certifying:—

Authority	Non-C	hinese.	Chir	nese.			
certifying cause of death.	Number of	Percentage of	Number of	Percentage of			
or deam.	Cases.	the whole.	Cases.	the whole.			
Medical practition-							
ers in Attendance.	225	91.46	11,926	54.4			
Medical Officer of Health			44	0.2			
Tung Wah Hospital.			757	3.5			
Tung Wah Eastern							
Hospital	*******		775	3.5			
Kwong Wah Hospital			1,209	5.5			
Coroner from in-			1,200	0.0			
formation receiv-							
ed from the M.O.	0.1	0.54	5 910	02.0			
i/c Mortuaries Asst. Registrars,	21	8.54	5,219	23.9			
N. T			1,983	9.0			
Total	246		21,913				

Deaths registered in Hong Kong, Kowloon and New Territories.

The following tables show the number of deaths registered by the various registries:—

	ories.—							
Hong Kong	***************************************	Deaths	regist	tered.	-			
Registries.	1932	1933	_ 1	1934		1935		
The General Register Office Victoria. No. 2, Police Station No. 7, Police Station Shaukiwan Police		8,684 92 46	6	9,301 67 38		67		,262 736 747
Station	314	257		247		283		
Aberdeen Police Station	218	167	,	179		195		
Stanley Police Station	12	40		33		39		
Total	11,843	9,286	9	9,865		11,262		
Kowleen Periatries		Deaths	regist	ered.				
Kowloon Registries.	1932	1933	1	1934		1935		
Kowloon Death Reg. Office Yaumati Police	5,420	5,013	5	5,172		,365		
Station	863	895		924	1,	134		
Shamshuipo Police Station Waw'aan City Police	1,271	1,543	1	1,630		1,992		
Kowloon City Police Station	432	483		382	1	423		
Total:	7,986	7,934	8	,108	8,	8,914		
New Territories		1931 Census	D	Deaths re		egistered.		
Registries.		population.	1932	1933	1934	1935		
(N.T.—North) Shatin Taipo Shataukok Sheung Shui Lok Ma Chau Autau Ping Shan Saikung (N.T.—South) Tsun Wan Cheung Chau		4,346 12,684 8,941 10,208 4,377 12,887 12,660 7,585 5,355 5,477	16 14 2 11 - 9 6 3 40 122	67 196 98 111 66 215 156 85	92 195 155 162 86 232 263 156 140 173	104 270 117 175 70 274 252 167		
Tai O (Lantau Island)	••••••	7,409	87	78	139	183		
Total		91,929	310	1,370	1,793	1,983		

Non-Chinese Deaths registered during 1935.

There were 220 civilian, 16 army and 10 navy deaths as follows:—

British	80	(4	stillbirths)
American	6		
French	1		
German	1		
Netherland	1		
Norwegian	1		
Italian	2		
Russian	1		
Canadian	2		
Spanish	1		
Latvian	1		
Portuguese	48	(1	stillbirth)
Japanese	25		
Indian	54	(2	stillbirths)
Mexican	2		
Belgian	1		
Hungarian	1		
Filipino	7	(1	stillbirth)
Annanuite	1		
Swiss	1		
Polish	1		
Malayan	4		
Korean	1		
Eurasian	3		
Total	246		

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